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ANALYSIS OF THE ECONOMIC IMPACTS OF THE
PROPOSED CHANGE IN SAN FRANCISCO ZONING

A Report to
The San Francisco Department
of City Planning

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From:

GRUEN GRUEN + ASSOCIATES
Economists & Sociologists

The preparation of this report was financed through a grant from the U.S. Department of Housing and Urban Development under provisions of Section 701 (A) of the Housing Act of 1954, as amended.

December 17, 1976

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Analysis of the economic
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While we owe our appreciation to many, Gruen Gruen + Associates is solely responsible for the contents of this report.

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I INTRODUCTION

Gruen Gruen + Associates' role in the Residential Zoning Study has been to provide assistance to the Department of City Planning in evaluating the socio-economic impacts of the May 20 zoning regulations. • Our work plan called for the provision of services in two areas:

1. an economic analysis of the impact of the May 20 zoning upon three characteristics of the housing market - housing production, housing costs, and land values;
2. the development of a comprehensive list of questions being asked or likely to be asked by representatives of public and private citizens groups concerning the economic impacts of the revised zoning regulations, along with a proposed methodology for answering them.

In this report, we will summarize our findings and the approach utilized in completing these tasks. The development and implementation of a methodology to forecast the likely socio-economic impacts of the zoning change upon housing production has been a key component of our study. The developed methodology which is described in this report provides a framework for answering the questions that are being asked by citizen groups concerning the economic implications of the revised zoning regulations. Our implementation of the methodology for two test areas of the City and the general analysis we did in developing it was used to make general predictions of the economic impact of the proposed zoning changes on housing production, housing costs and land values.

In Part II of this report, we will present our methodological framework that we have developed to forecast the impacts of the change in zoning regulations and discuss its potential future use. In Part III we will present the data obtained in implementing the methodology for two areas of the city. Finally, in Part IV, we will present our analysis of the change in zoning regulations upon the three characteristics of the housing market and analyze the impacts upon characteristics that are corollary to these three.

II. THE METHODOLOGICAL FRAMEWORK

A. GENERAL APPROACH

Gruen Gruen + Associates (GG+A) has undertaken a micro-economic approach to analyzing the impacts of the zoning change upon the San Francisco housing market. The type of data available to us to perform the study acted as an important discipline of the type of methodology that was used. We relied upon existing data, data provided by the Department of City Planning, and primary data obtained from interviews of San Francisco realtors and builders. We were, therefore, constrained from using an approach that would provide spatially detailed quantitative estimates of the mix, quantity, rental rates and values of the San Francisco housing stock likely to be induced by the proposed zoning changes because it would require more data than can be available in the near future. Instead, we have designed a methodology to be used with available data which provides reasonably accurate forecasts of the nature and magnitude of most of the major changes on the San Francisco housing stock. We used a small number of housing structure prototypes and seven housing submarkets to represent the large number of different possible housing types, costs, values and

locations existing or likely to be built under the pre-May 20 and May 20 zoning regulations.

The methodological framework which we have developed could be used to analyze the impacts of a change in zoning regulations upon the market for both rehabilitated housing and new housing in San Francisco. The assessment of both of these types of development forms the foundation of a base case forecast of housing production. To use the methodology to assess the impacts of rehabilitated housing, one could develop prototypical examples of rehabilitated structures and evaluate their economic feasibility and profitability for development under both zoning conditions in the same way that prototypical examples of new structures would be evaluated. While this can be done using our methodology, our work plan called for the evaluation of the impacts upon new construction only. Since the potential for rehabilitation affects the value of existing structures, which in turn affects the costs of building new structures, our analysis will reflect the likelihood that existing units will be retained rather than replaced, partially because the potential for rehabilitation and remodeling exists.

Any precise forecast of the city's housing future under the new and pre-May 20 zoning should also consider expected future shifts in the demand for units of different types as estimates are made of the way the supply of housing units will adjust to the legal ground rules set by each of the two zoning regulations. But, while it would provide a great deal of useful information, no study of expected future shifts in the demand for housing in the city was authorized. Therefore, the micro-economic analysis that GG+A has done with presently obtainable

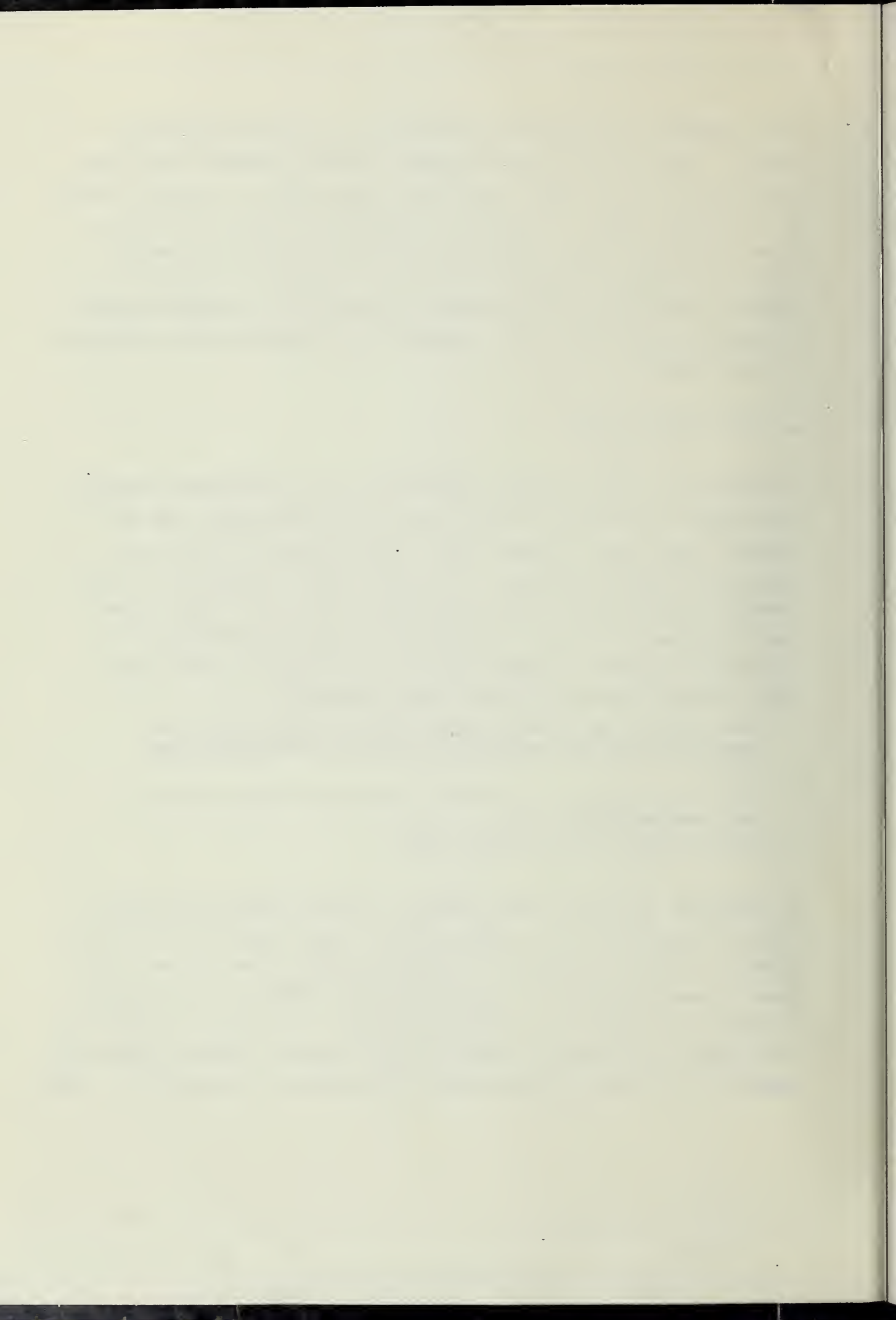
data assumes the continued existence of present demand patterns. The nature of these present demand patterns has been inferred from the rents and prices that apply to housing units of different types in alternate submarket areas of the city. These price and rent estimates were obtained by the interviews we conducted with realtors and builders. As more data becomes available in the future, however, the methodology can be used in providing more detailed and comprehensive estimates of the impacts.

B. THE METHODOLOGY

An impact of a new zoning ordinance is the difference between the results that would follow from its application and the results that would follow from a continuation of the pre-existing zoning ordinance. In other words, impacts are the changes brought about by a particular action; in this case, the adoption of the new residential zoning provisions. As discussed earlier, we will analyze the economic impact upon three characteristics of the housing market:

1. the ability to produce new housing in San Francisco, particularly for households with disadvantaged persons;
2. the rental costs and housing costs for both existing and new housing; and
3. land values and property taxes.

In addition to these three impacts, we have identified additional impacts that are corollary to these three and which are likely to be of interest to concerned public and private citizens in San Francisco. These additional impacts are analyzed in whole or in part as a consequence of the analysis which was undertaken to assess the first three impacts. These additional impacts are listed in the form of questions in Appendix A. Also



1

listed in Appendix A are six additional questions concerning the economic impacts of the revised zoning regulations which are likely to be asked by representatives of public and private citizen groups. Our study will not analyze the impacts posed by these questions because it would require additional data and a study of demand relationships, which is not called for in our contract.

To analyze the first impact concerning the effect of the zoning changes upon the production of new housing, we evaluated the difference that the change in zoning regulations would have upon the potential for new construction. Our methodology relied on the simple assumption that a new unit of a given type on a particular site eventually would be built if the following three conditions prevailed:

1. the new structure could be legally and physically put on the site;
2. the total value of the new structure, after construction, exceeded the total cost of acquiring the site and constructing the building. In other words, the production of the new structure was economically feasible; and
3. no other legally and physically feasible structure could be constructed on the site so as to widen the gap between total costs and total value. That is, the structure under consideration was the most profitable type of feasible building that could be put on the site being considered.

Given these assumptions, the housing production impact of the zoning change was estimated by comparing the economic feasibility and profitability of producing units of different types under the pre-existing zoning with their feasibility and profitability under the new zoning. Extremely accurate and spatially detailed estimates of future housing production could have been developed if cost and value data were developed for each area of the city in which costs and values are likely to

vary for each of the types of structures that could legally be constructed under the two sets of zoning provisions being considered. But, since such detailed data is difficult to obtain, we have used a two-stage approach that provided general indications of the type and scale of production likely to take place under the two zoning conditions.

In the first stage of the analysis, the type of housing structure that was the most likely structure to be built in each zoning district was determined for both zoning conditions. The outcome of this stage was a set of housing structure prototypes, one for each zoning district for each zoning regulation. A variety of housing structure types were used which could be constructed under various zoning districts of both zoning conditions. These were developed by the architect, Dan Solomon. Nineteen types were developed in all, ranging in size, density and character.* The density of these structures ranges from a single dwelling unit per lot to 12 units per lot. A diagram, floor plan and description of each structure type is in Appendix B. Also used in this stage was information obtained from the San Francisco Department of City Planning indicating the zoning district(s) of both the pre-May 20 and May 20 zoning conditions in which each structure type is permitted to be constructed. Table 1 summarizes the structure types which are allowed in each zoning district of the pre-May 20 and the May 20 zoning regulations.

*Eight of an original twenty-seven structural types were eliminated during the study. To avoid confusion, the numbers assigned to the remaining structures remained the same, although the number of structures totals nineteen.

Information obtained from interviews of realtors and builders was used as one input for estimating the most likely structure to be constructed in each zoning district for a particular area of the city. For different areas of the city, several realtors were interviewed to obtain an estimate of the market value (or capitalized rental value) of each structure type if it were sold on the market as a new structure. Several builders were interviewed to obtain an estimate of the cost of building and financing the construction of each structure. The difference between the market value of the structure and the cost of constructing the structure, including financing, is equal to an amount called the residual land value. This value is the maximum allowable amount that a developer, who is constructing and selling the structure, could afford to pay for the site on which the building is constructed. For each zoning district, the structure that we identified as being the most likely to be built is the one having the greatest residual land value. We have defined this structure as the prototypical structure for a particular zoning district.

TABLE 1

Allowable Feasible Structure Types for Each Zoning District of the
Pre-May 20 and May 20 Zoning Regulations

Structure Type	Pre-May 20					May 20 Zoning										
	R-1	R-2	R-3	R-3.5	R-4	R-5	RH-1 (S)			R-C-1			R-C-2		R-C-3, R-C-4	
							RH-1	RH-2	RH-3	RA-1	RM-1	RA-2	RM-2	RA-3, RA-4	RM-3, RM-4	
																RH-1 (D)
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16			*	*	*	*	*	*	*	*	*	*	*	*	*	*
17			*	*	*	*	*	*	*	*	*	*	*	*	*	*
19			*	*	*	*	*	*	*	*	*	*	*	*	*	*
20			*	*	*	*	*	*	*	*	*	*	*	*	*	*
22			*	*	*	*	*	*	*	*	*	*	*	*	*	*
24			*	*	*	*	*	*	*	*	*	*	*	*	*	*
25			*	*	*	*	*	*	*	*	*	*	*	*	*	*
26			*	*	*	*	*	*	*	*	*	*	*	*	*	*
27			*	*	*	*	*	*	*	*	*	*	*	*	*	*

*Indicates construction of structure type is legally feasible.

Source: Gruen Gruen + Associates;
Department of City Planning.

In phase 2 of the analysis, the economic and legal feasibility of building each prototype for the pre-May 20 and May 20 zoning conditions was evaluated. A prototype is legally feasible to construct in a particular area if the zoning district which the prototype represents is assigned to the area according to the zoning regulations under consideration.

It is economically feasible to construct a prototype on a particular site if the market value of the structure is greater than the costs of construction, financing, and acquiring the site on which the prototype is to be built. Since most sites in San Francisco are already occupied, the cost of acquiring a site usually includes the cost of the land, the cost of purchasing an existing building on the site, plus costs of demolition and site preparation. Site costs vary according to the type of unit occupying the site. It is generally the case that the acquisition of a site having a low density structure on it is less expensive than the acquisition of sites with higher density structures. Estimates of the cost of purchasing structures of varying types in a particular area were obtained from interviews of realtors familiar with the area. Estimates of demolition costs and site preparation costs were obtained from interviews of builders. A shorthand way to determine the economic feasibility of constructing a prototype on a particular site is to compare the residual land value for the prototype to the cost of the site. When the residual value is greater than the cost of acquiring the site, then it is economically feasible to construct the prototype on that site. Thus, in phase 2, for each area under consideration, each prototype is first evaluated for legal feasibility and then for economic feasibility on sites of varying costs. By comparing the development and replacement feasibility for the two zoning conditions, one can determine the direction of the impact upon housing production resulting from the May 20 zoning changes.

While this two-stage analysis can be performed for all areas of the city, it is possible to apply it to a few areas and then estimate the direction of impact upon the rest of the city, based upon information concerning the nature of San Francisco housing submarkets. This approach relies on the basic assumption that there are a small number of housing submarket areas in San Francisco within which the rental values or sales price for the same type of structure is approximately the same. A map designating the approximate boundaries of these submarket areas was developed by several San Francisco realtors and is shown in Map 1 below. Therefore, by interviewing a few realtors and builders concerning market values of different types of structures in one area, one can determine the approximate rental values of the structures in all other areas which have the same housing submarket designation. Thus, by utilizing the two-stage analytical approach for each housing submarket area, it is possible to determine the economic feasibility of development on a city-wide level.

This framework which we have established to measure the city-wide impacts of the zoning changes utilizes a housing submarket map which can be tested for accuracy and altered as the methodology is implemented in various areas of the city. As the reader will learn in part III of this report, we found this to be the case when we implemented the methodology in two test areas of the city. We learned that census tract 109 and census tract 327 do not both have the same medium high rent levels as indicated by the housing submarket map. Census tract 109, we found, should actually have been assigned a high rent level, submarket 2 designation.

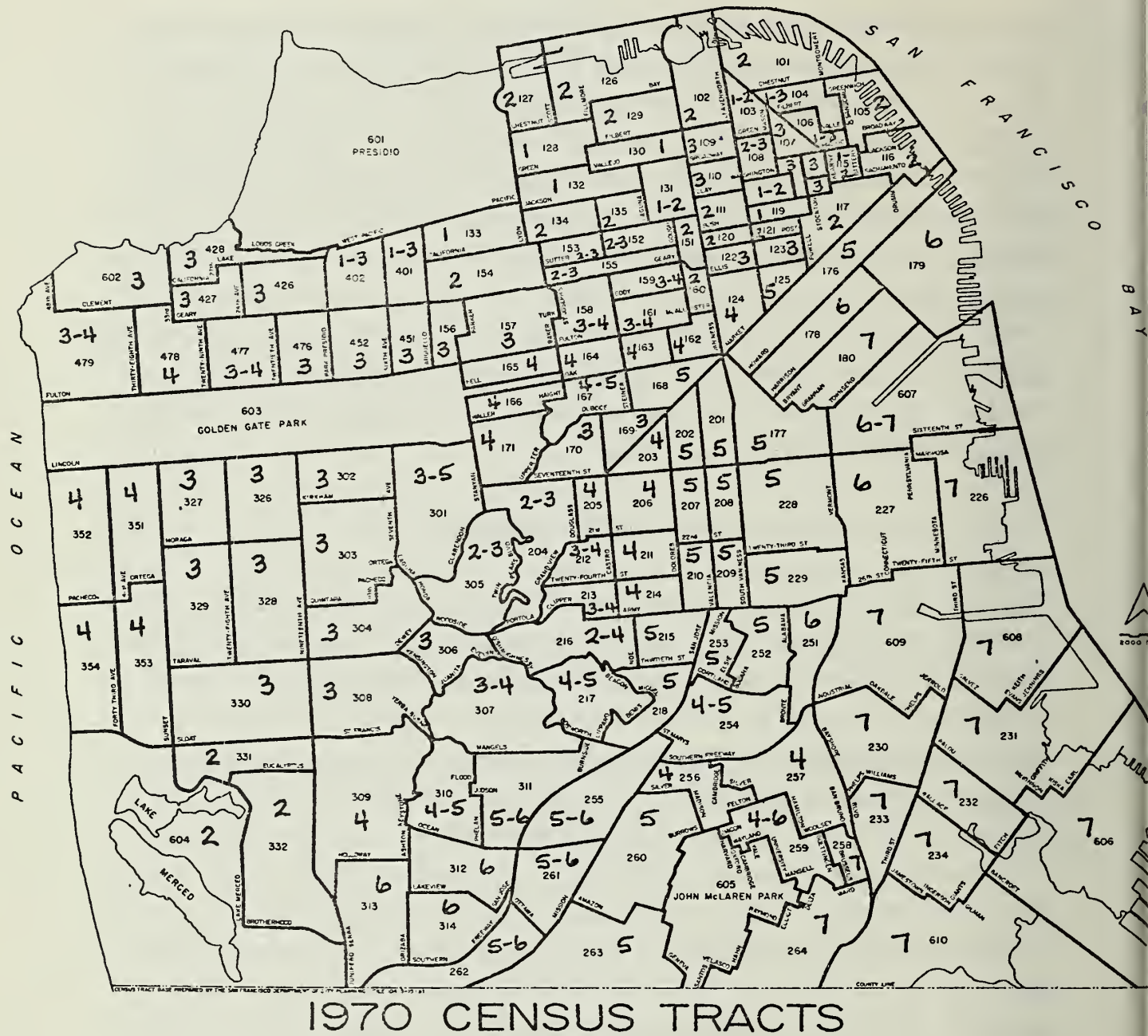
Approximations of the magnitude of the impact upon housing production resulting from the change in zoning regulations can be developed by estimating the number of feasible sites that exist under the old and new zoning map for each prototypical structure. This process draws upon data provided by the Department of City Planning concerning the number of vacant lots and the number of existing units of varying densities by zoning district. Once the impacts upon housing production have been estimated using the methodological framework outlined above, one can estimate the impacts of the zoning change upon housing costs, housing rents, land values and tax assessments.

III. TWO SAMPLE CENSUS TRACTS

In part III of this report, we will present and discuss the outcome of a test case that was performed using our methodology to estimate the nature and extent of the impact upon potential housing production resulting from the change in zoning regulations. Two areas of the city were selected for the test case: census tract 327 in the Sunset District, and census tract 109 in the Russian Hill area. These areas can be located on Map 1 on page 12. These two areas were chosen for two reasons. First, because the two areas were assigned the same housing submarket designation, we would be able to test the accuracy of the housing submarket map. Second, because the change in zoning districts in each area led us to expect a different level of impact in the two areas, it would test the validity of our methodological framework to measure the impacts of zoning changes.

MAP 1

First Approximation of Relative Rents in San Francisco Housing Submarkets*



- 1 - Premium High Rent
- 2 - High Rent
- 3 - Medium High Rent
- 4 - Medium Rent
- 5 - Medium Low Rent
- 6 - Low Rent
- 7 - Lowest Rent

*Housing submarket boundaries adjusted to conform to census tract boundaries.

To obtain the market value of each type of new structure and of existing structures, two realtors were interviewed concerning the Sunset area and three realtors were interviewed concerning Russian Hill. Three builders were interviewed to obtain information concerning the cost of constructing each of the structure types, the cost of demolition of existing structures, and the cost of site preparation. Using this information, a prototype was selected for each zoning district of both zoning conditions for the Sunset and Russian Hill tracts, based upon the residual value obtained for each type of structure.

Tables 2 and 3 illustrate how we estimated which structure would be the one that would most likely be built in each of the zoning districts of the Sunset census tract. First, the residual values of the structure types that are allowed to be built in a zoning district were compared in order to choose the one with the greatest value. For example, as shown in Table 1, structures 1, 2, 4, 6 and 7 are all single-family structures that are allowed to be built in an R-1 district under the pre-May 20 zoning regulations and in an RH-1 district under the May 20 zoning regulations. Of these structures, number 4 has the greatest residual value, \$24,025. Therefore, structure 4 is chosen as the prototype for the R-1 and RH-1 zoning districts of the Sunset census tract, as shown in Table 3. Estimates of site costs resulting from the replacement of existing uses in the Sunset are shown in Table 4.

TABLE 2

Estimate of Sales Price, Construction Cost
& Residual Land Value by Type of Structure
Sunset District, Census Tract 327

<u>Type of Structure</u>	<u>Sales Price (\$)</u>	<u>Construction Cost (\$)</u>	<u>Residual Land Value (\$)</u>
1	73,750	53,590	20,160
2	86,250	76,245	10,005
4	77,500	53,475	24,025
6	91,250	83,950	7,300
7	92,500	81,420	11,080
10	130,000	105,685	24,315
11	138,500	119,370	19,130
12	153,500	120,405	33,095
14	154,000	125,695	28,305
15	375,000	370,760	4,240
16	160,000	131,445	28,555
17	190,000	161,805	28,195
19	177,000	130,100	46,900
20	190,000	148,120	41,880
22	180,000	142,715	37,285
24	195,000	162,035	32,965
25	210,000	191,245	18,755
26	250,000	202,170	47,830
27	405,000	333,500	71,500

Source: Interviews conducted by Gruen Gruen + Associates.

TABLE 3

Prototypes Most Likely to be Built in
Each Zoning District Under Pre-May 20
and May 20 Zoning Conditions
Sunset District, Census Tract 327

<u>Zoning Condition</u>	<u>Zoning District</u>	<u>Prototype</u>	<u>Maximum Resi- dual Land Value</u>
Pre-May 20	R-1	4	24,025
	R-2	12	33,095
	R-3	19	46,900
	R-3.5	26	47,830
	R-4	27	71,500
	R-5	27	71,500
May 20	RH-1	4	24,025
	RH-2	12	33,095
	RH-3	19	46,900
	RM-1, RA-1, R-C-1	19	46,900
	RM-2, RA-2, R-C-2	19	46,900
	RM-3,4 RA-3,4 R-C-3,4	27	71,500

Source: Interviews conducted by Gruen Gruen + Associates

TABLE 4

Estimate of Site Costs Resulting from
the Replacement of Existing Uses in
the Sunset District, Census Tract 327

<u>Existing Use</u>	<u>Sales Price (\$)</u>	<u>Demolition Cost (\$)</u>	<u>Site Preparation Cost (\$)</u>	<u>Total Site Cost</u>
Single-Family, Row	59,000	3,000	2,000	66,000
Single-Family, Detached	59,000	3,000	2,000	66,000
Two Units	71,000	5,000	2,000	80,000
Three-Four Units	96,000	5,000	2,000	105,000
Five-Nine Units	190,000	7,000	2,000	201,000
Ten Units	225,000	7,000	2,000	234,000

Source: Interviews conducted by Gruen Gruen + Associates.

To determine which zoning districts are allowed in each census tract according to the pre-May 20 and the May 20 zoning regulations, we referred to a table that was drawn up by the Department of City Planning. This is shown in Table 5. As indicated, R-1, R-2 and R-3 zoning districts are allowed under the pre-May 20 zoning and RH-1, RH-2, RM-1 and R-C-1 are allowed under the May 20 zoning. By comparing the residual land value for each allowable prototype to the different site costs, we estimated the economic feasibility of constructing each of the prototypes in the Sunset census tract. The outcome of this analytical process is shown in Table 6.

Zoning Districts Allowed in Some San Francisco Census Tracts
Under the Pre-May 20 and May 20 Zoning Regulations

San Francisco Census Tract	Pre-May 20 Zoning	May 20 Zoning
101	R-4 C-2	RH-3 RM-1 RH-2 RA-3 R-C-3 C-2
102	R-1 R-2 R-3 R-4 R-5 C-2	RH-1 RH-2 RH-3 RM-1 RM-2 RA-3 RH-1(D) C-2
103	R-3 R-4 R-5 C-2	RI-1 RH-2 RM-1 RM-2 C-2
104	R-4 C-2	RH-2 RH-3 RM-1 C-2
108	R-3 R-4 R-4-C R-5	RH-2 RM-1 RM-2 RA-4 R-C-4
109	R-3 R-4 R-5 C-1 C-2	RH-2 RH-3 RM-1 RM-2 R-C-1 C-1 C-2
111	R-4 R-5 C-2	RM-2 R-C-4 C-2
112	R-4 R-5	RH-2 RM-2 RM-4 R-C-2
113	R-4 R-4-C R-5 C-2	RH-2 RM-2 R-C-2 C-2
119	R-5 R-5-C C-3-G	RM-2 RM-4 R-C-3 R-C-4
129	R-3 R-4 C-2	RH-2 RH-3 RM-1 RM-2 C-2
130	R-2 R-3 R-4 C-2	RH-2 RH-3 RM-1 R-C-1 C-2
131	R-1 R-2 R-3 R-3.5 R-4 C-2	RH-1 RH-2 RM-1 RM-2 C-2
134	R-2 R-3 R-4 C-2	RH-2 R-C-1
152	R-2 R-3 R-3.5 R-4 R-5 C-2	RH-2 R-C-1 PR
154	R-1-D R-1 R-2 R-3 R-4 C-2	RH-1(D) RH-1 RH-2 RM-1 RA-1 C-2
156	R-1 R-2 R-3 R-4 C-1 C-2	RH-1 RH-2 RM-1 C-1 C-2
158	R-1-D R-3 R-4 C-2	RH-1 RH-2 RH-3 RM-1 RA-3 C-2 PR
163	R-3 R-4 C-2	RH-2 RH-3 RM-1 RM-2 RA-4 C-2
165	R-3 R-3.5 R-4 C-1	RH-2 RH-3 RM-1 R-C-1 C-1
166	R-3 R-3.5 R-4 C-2	RH-3 RM-1 RM-2 R-C-1 C-2
168	R-4 C-2	RH-3 RM-1 RM-2 C-2
169	R-3 R-4 C-2	RH-2 RM-1 C-2
170	R-1 R-2 R-3 R-4	RH-1 RH-2 RH-3 RM-1
171	R-1-D R-2 R-3 R-4 C-1	RH-1 RH-2 RI-3 R-C-1 RH-1(D)
202	R-1 R-3 R-4 C-2 CM	RH-1 RH-2 RH-3 RA-1 RM-1 CM C-2 R-C-1
206	R-1 R-2 R-3 R-4 C-2	RH-1 RH-2 RH-3 RM-1 RM-2 C-2 R-C-1
208	R-3 R-4 CM C-2	RH-2 RH-3 RM-1 R-C-1 CM C-2
210	R-3 R-4 R-5 C-2	RH-2 RH-3 C-2
212	R-2 R-3 R-4 C-2	RH-1 RA-2 RH-2 C-2
214	R-2 R-3 R-4 C-2 P	RH-2 RM-1 C-2 R-C-1 I P
227	R-3 C-2 CM M-1 M-2 P	RH-2 RA-2 PR M-1 R-C-1 C-2 P I

San Francisco
Census Tract

Pre-May 20 Zoning

May 20 Zoning

228	R-2	R-3	R-4	C-2	CM	M-1	P	RH-2	M-1	CM	RM-1	RH-3	C-2	P	I
229	R-2	R-3	R-4	C-2	CM	M-1	P	RH-2	C-2	M-1	RM-3	RA-1	P	I	
302	R-2	R-3	R-4	C-2				RH-1	RH-2	C-2/R-C-1		P	I		
326	R-2	R-3	R-4	C-2	CM	M-1	P	RH-2	RA-1	RM-3	C-2/R-C-1	M-1	C-2	P	I
327	R-1	R-2	R-3	C-1	P			RH-1	RH-1(D)	RH-2	RM-1	R-C-1	C-1	P	I
351	R-1	R-2	R-3	C-1				RH-1	RH-2	C-1	P	I			
352	R-1	R-2	R-3	C-1	C-2			RH-1	RM-1	RH-2	C-1	C-2	P	I	
477	R-2	R-3	R-4	C-2				RH-2	RM-1	R-C-1	RM-3	C-2	P	I	
478	R-1	R-2	R-3	C-1	C-2			RH-1(D)	RH-1	RH-2	R-C-2	C-2	RM-1	RM-2	P
479	R-1	R-2	R-3	C-1	C-2	P		RH-1	RH-2	R-C-1	C-1	RM-1	C-2	P	I

Source: San Francisco Department of City Planning

TABLE 6

Potential Replacement and Development Feasibility by Allowable
Prototypical Structure Under Pre-May 20 and May 20 Zoning,¹
Sunset District, Census Tract 327

Zoning Condition	Potential Use		Existing Use						
	Allowable Zoning District	Proto- typical Structure	Vacant ²	Single-Family Detached	Single-Family Row	2 Units	3-4 Units	5-9 Units	10+ Units
Pre-May 20	R-1	4	Yes	No	No	No	No	No	No
	R-2	12	Yes	No	No	No	No	No	No
	R-3	19	Yes	No	No	No	No	No	No
May 20	RH-1	4	Yes	No	No	No	No	No	No
	RH-2	12	Yes	No	No	No	No	No	No
	RM-1	19	Yes	No	No	No	No	No	No
	R-C-1	19	Yes	No	No	No	No	No	No

¹A "yes" or "no" in a cell of the matrix designates whether it is feasible for the existing use to be replaced by a given prototypical structure.

²In the long run, the site cost of a vacant lot in a zoning district will be just less than the value of the maximum land residual in that zoning district, thus making development feasible.

Source: Gruen Gruen + Associates

Using data provided by the Department of City Planning on the number of vacant lots and existing structures on lots by zoning district, we were able to estimate the number of feasible sites on which prototypical structures could be constructed under the pre-May 20 and May 20 zoning conditions. This data is shown in Table 7. . Since we find that it is feasible to construct only two units of the structure type 4 under both zoning conditions, the impact upon housing production in the Sunset census tract area is zero. This is shown in Table 3.

TABLE 7

Number of Lots by Zoning District
in Census Tract 327, Sunset District

Allowable Zoning Districts	Total Lots in Zoning District	Lots With Residential Use	Lots With Residential Use Only	Lots With Residential & Commercial Use	Lots With Commercial Use Only	Vacant	Single Detached	Single Row	Two Units	Three & Four Units	Five to Nine Units	Ten Plus Units	Commercial Industrial	Other
PRE-MAY 20														
R-1	1462	1459	1459	0	0	2	180	1238	38	3				1
R-2	347	345	343	2	2			264/1	72/1	7	2		2	
R-3	104	96	84	12	6			20/6	68/5	4/1	3	1	6	2
C-1	31	22	16	6	9				9/2	7/4	4	2	9	
MAY 20														
RH-1	1619	1619	1617	2	0		32	1503/2	79	5				
RH-1 (D)	161	159	159	0	0	2	148	6	4	1				
RH-2	53	51	49	2	2			6/1	38/1	3	4		2	
RM-1	65	62	56	6	1			5/2	51/4	4	1	1	1	2
R-C-1	13	8	4	4	5			2/2	5/1	1/1			5	
C-1	32	23	17	6	9				10/2	7/4	4	2	9	
I	1	0	0	0	0									1
TOTALS	1944	1922	1902	20	17		180	1522	187	21	9	3	17	3

X/X= Total No. Lots/Of those, no. with commercial & residential use

Potential Impact by Allowable Prototypical Structure
Under Pre-May 20 and May 20 Zoning
Sunset District, Census Tract 327

Zoning Condition	Potential Use		Existing Use						Units Constructed
	Proto-typical Structure	Units per Structure	Vacant	Single-Family Detached	Single-Family Row	2 Units	3-4 Units	5-9 Units	10+ Units
Pre-May 20	4 (R-1)	1	2	*	*	*	*	*	*
	12 (R-2)	2	0	*	*	*	*	*	*
	19 (R-3)	3	0	*	*	*	*	*	*
	Units Replaced		0						
May 20	4 (RH-1)	1	2	*	*	*	*	*	*
	12 (RH-2)	2	0	*	*	*	*	*	*
	19 (RM-1)	3	0	*	*	*	*	*	*
	19 (R-C-1)	3	0	*	*	*	*	*	*
	Units Replaced		0						
			2 Total Units Added						
			0 Total Units Replaced						
			2 Net Units Constructed						

*Indicates no feasible replacement of existing use.

0 Difference Under Two
Zoning Conditions

Source: Gruen Gruen + Associates

Tables 9 through 14 present the same steps followed for Russian Hill as were followed for Sunset.* It is interesting to note that, contrary to previous belief, the market value of the structures in Russian Hill are not similar to those in the Sunset area. The data presented here leads us to believe that this Russian Hill census tract area should actually be designated housing submarket 2. It is also interesting to note that there is a significant change in the number of housing units that would be constructed under the two zoning conditions in the Russian Hill census tract. Approximately 1,179 fewer housing units would be eventually constructed in this area under the May 20 zoning regulations than under the pre-May 20 zoning regulations. It is important to recognize in interpreting this data, however, that the estimates of housing production obtained are based upon average estimated values of sales prices, construction costs and site costs. Thus, there may be a small number of cases which may not behave as forecast. For example, we have determined that the average site cost for a 2-unit structure located in an R-5 zoning district under the pre-May 20 zoning condition would be replaced by a structure characterized by the type-27 prototype which has a residual value of \$120,580. If, however, there were a 2-unit structure having a site cost of \$122,000, then that particular structure would not be replaced. However, because our estimates are based upon averages, we expect that these outlying effects will compensate each other.

*Due to the extreme variation in the topography, soil conditions and density of the area, causing increased difficulty of construction, a factor of 12% was added to construction costs in the Russian Hill area.

In summary, then, the data presented here for the two test areas, Russian Hill and Sunset, confirm our previous expectations of the direction and magnitude of impact upon housing production and provides a good illustration of the implementation of our methodology.

TABLE 9

Estimate of Sales Price, Construction Cost
& Residual Land Value by Type of Structure
Russian Hill, Census Tract 109

<u>Type of Structure</u>	<u>Sales Price (\$)</u>	<u>Construction Cost (\$)</u>	<u>Residual Land Value (\$)</u>
1	92,400	60,020	32,380
2	115,500	85,390	30,110
4	99,000	59,890	39,110
6	132,000	94,025	37,975
7	118,800	91,190	27,690
10	171,600	118,365	53,235
11	178,200	133,695	44,505
12	204,600	134,855	69,745
14	171,600	140,780	30,820
15	514,800	415,251	99,550
16	207,900	147,220	60,680
17	237,600	181,220	56,380
19	191,400	145,710	45,690
20	247,500	165,895	81,605
22	224,400	159,840	64,560
24	244,200	181,480	62,720
25	277,200	214,195	63,005
26	290,400	226,430	68,970
27	494,100	373,520	120,580

Source: Interviews conducted by Gruen Gruen + Associates.

TABLE 10

Estimate of Site Costs
When Replacing Existing Uses
Russian Hill, Census Tract 109

<u>Existing Use</u>	<u>Sales Price (\$)</u>	<u>Demolition Cost</u>	<u>Site Preparation Cost</u>	<u>Total Site Cost</u>
Single-Family, Row	70,000	4,000	4,000	78,000
Single-Family, Detached	72,000	4,000	4,000	80,000
Two Units ¹	97,000	6,500	4,000	107,500
Three-Four Units	120,000	6,500	4,000	130,500
Five-Nine Units	200,000	9,000	4,000	213,000
Ten Units	230,000	9,000	4,000	243,000

¹Estimated average of sales price of two-unit flats and apartments.

Source: Interviews conducted by Gruen Gruen + Associates.

TABLE 11

Prototypes Most Likely to be Built in
Each Zoning District Under Pre-May 20
and May 20 Zoning Conditions
Russian Hill, Census Tract 109

<u>Zoning Condition</u>	<u>Zoning District</u>	<u>Prototype</u>	<u>Maximum Residual Land Value</u> (\$)
Pre-May 20	R-1	4	39,110
	R-2	12	69,745
	R-3	20 ¹	81,605
	R-3.5	20 ¹	81,605
	R-4	27	120,580
	R-5	27	120,580
May 20	RH-1	4	39,110
	RH-2	12	69,745
	RH-3	20 ¹	81,605
	RM-1, RA-1, R-C-1	20 ¹	81,605
	RM-2, RA-2, R-C-2	20	81,605
	RM-3,4 RA-3,4 R-C-3,4	27	120,580

¹While structure type number 15 had the maximum residual land value for this group, it was not chosen as the prototype for this zoning district because it occupies two lots. In this case, the site cost would be twice as much, thus making construction of such a structure economically infeasible.

Source: Interviews conducted by Gruen Gruen + Associates.

TABLE 13

Number of Lots by Zoning District
in Census Tract 109, Russian Hill

Allowable Zoning Districts	Total Lots in Zoning District	Lots With Residential Use	Lots With Residential Use Only	Lots With Residential & Commercial Use	Lots With Commercial Use Only	Single Detached					Two Units	Three and Four Units	Five to Nine Units	Ten Plus Units	Commercial Industrial	Other
						Vacant	Single	Detached	Single Row	Units						
PRE-MAY 20																
R-3	95	93	86	7	1	1	24/1	31	24/3	12/2	2/1	1				
R-4	284	272	258	14	6	4	23/4	80/5	82/2	54/3	31	6				2
R-5	55	52	51	1	0	2	3	11	14	10/1	14					1
C-1	8	6	1	5	2			3/2	2/2		1/1	2				
C-2	87	65	36	29	21		3/3	13/11	13/2	15/6	21/7	21				1
MAY 20																
RH-2	42	40	38	2	1	1	10/1	14/1	8	5	1	1				
RH-3	214	208	201	7	1	4	30/1	65/2	60/2	35/2	18	1				1
RM-1	113	105	100	5	4	2	4/1	35/2	36	17/2	13	4				2
RM-2	56	55	53	2	1		5/1	8	11	17/1	14	1				
C-1	7	5	0	5	2			2/2	2/2		1/1	2				
C-2	86	64	36	28	21		3/3	13/11	13/2	14/5	21/7	21				1
RC-1	11	11	4	7	0		1/1	1	5/3	3/2	1/1					
TOTALS	529	488	432	56	30	7	2	53/8	138/18	135/9	91/12	69/9	30			4

X/X= Total No. of Lots/Of Those, Number With
Commer. & Residen. Use

TABLE 12

Potential Replacement and Development Feasibility by Allowable
Prototypical Structure Under Pre-May 20 and May 20 Zoning¹
Russian Hill, Census Tract 109

Zoning Condition	Potential Use		Existing Use						
	Allowable Zoning District	Proto- typical Structure	Vacant ²	Single-Family	Single-Family	2 Units	3-4 Units	5-9 Units	10+ Units
				Detached	Row				
Pre-May 20	R-3	20	Yes	Yes	Yes	No	No	No	No
	R-4	27	Yes	Yes	Yes	Yes	No	No	No
	R-5	27	Yes	Yes	Yes	Yes	No	No	No
May 20	RH-2	12	Yes	No	No	No	No	No	No
	RH-3	20	Yes	Yes	Yes	No	No	No	No
	RM-1	20	Yes	Yes	Yes	No	No	No	No
	RM-2	20	Yes	Yes	Yes	No	No	No	No
	R-C-1	20	Yes	Yes	Yes	No	No	No	No

¹A "yes" or "no" in a cell of the matrix designates whether it is feasible for the existing use to be replaced by a given prototypical structure.

²In the long run, the site cost of a vacant lot in a zoning district will be just less than the value of the maximum land residual in that zoning district, thus making development feasible.

Source: Gruen Gruen + Associates

Potential Impact by Allowable Prototypical Structure
Under Pre-May 20 and May 20 Zoning
Russian Hill, Census Tract 109

Zoning Condition	Potential Use		Existing Use					Units Constructed	
	Proto-typical Structure	Units per Structure	Vacant	Single-Family Detached	Single-Family Row	2 Units	3-4 Units		5-9 Units
Pre-May 20	20 (R-3)	3	1	0	23	*	*	*	*
	27 (R-4)	12	4	2	19	75	*	*	*
	27 (R-5)	12	2	0	3	11	*	*	*
	Units Replaced		0	2	45	172			
May 20	12 (RH-2)	2	1	*	*	*	*	*	*
	20 (RM-3)	3	4	0	29	*	*	*	*
	20 (RM-1)	3	2	0	3	*	*	*	*
	20 (RM-2)	3	0	0	4	*	*	*	*
	20 (R-C-1)	3	0	0	0	*	*	*	*
	Units Replaced		0	0	36				
			69						
			1200						
			192						
			1494 Total Const.						
			223 Total Replaced						
			1271 Net Units Constructed						
			2						
			99						
			15						
			12						
			0						
			128 Total Const.						
			36 Tot. Replaced						
			92 Net Units Constructed						

*Indicates no feasible replacement of existing use.

1179 Difference
Between Two
Zoning Con-
ditions

Source: Gruen Gruen + Associates

IV. EVALUATION OF IMPACTS

A. IMPACT ON HOUSING PRODUCTION

The result of applying the methodology described above to two San Francisco test areas cannot be used to predict the magnitude of the impact that changed zoning would have on housing production in the entire city throughout all future years. But these results do provide insight into the nature and direction of the impact of the new residential zoning regulations on the ability of the private housing market to produce new housing in San Francisco, particularly for disadvantaged households. That is, the work GG+A has done with the City of San Francisco Planning Department has provided an answer to the first question posed at the start of our study.

The impact of the zoning change on housing production varies significantly between the many neighborhoods that form differing housing submarkets in San Francisco. During the course of our work, we identified several questions that were being asked by the public and that were corollary to the basic three questions that our work was trying to answer. As indicated earlier, these questions are listed as numbers 4 through 9 in Appendix A of this report. Insight into the impact of the new residential zoning regulations on housing production can be gained by answering these corollary questions. Question 4 asks "What type of units will be built under the pre-existing and proposed new zoning?". Table 15 below draws upon the work that has been done to approximate the site price that can be paid by builders of different types of structures in one area of the Russian Hill district. The table points out the well known phenomenon that developers of higher density units can afford to pay more for

TABLE 15

Approximate Site Price That Can be Paid by
Builders of Differing Types of Structures
in One Area of the Russian Hill District

<u>Proto- type #</u>	<u>Type of Structure</u>	<u>Approximate Site Price</u>
4	Single-Family Row House	\$39,110
12	Two Tandem Townhouses	69,745
20	Three Conventional Flats	81,605
27	Twelve-Unit Apartment Bldg.	120,580

Source: Gruen Gruen + Associates and
Interviews of San Francisco
Realtors and Builders.

sites than can developers of lower density units. While all of the structural types listed on Table 15 could be built on a vacant lot, only the builders of the higher density structures can afford to purchase existing units on the market and then demolish them in order to prepare sites for their structures. Thus, the type of units most likely to be built in San Francisco, when they replace existing structures, are those listed in Table 15 as type numbers 20 and 27.

Corollary question 5 asks what type of units that are already built will be removed or rehabilitated under the pre-existing and proposed new zoning. To answer this, one must know the costs of purchasing sites with structures of differing types on them. Site costs for the same area of the Russian Hill District are shown in Table 16. A comparison of site prices

TABLE 16

Cost of Purchasing Sites for Construction
of New Structures by Type of Structure
to be Replaced

<u>Existing Structure to be Replaced</u>	<u>Site Cost</u>
Single-Family Row House	\$78,000
Single-Family Detached House	80,000
Two Unit Structure	107,500
Three-Four Unit Structure	130,500
Five-Nine Unit Structure	213,000
Ten Unit Structure	243,000

Source: Gruen Gruen + Associates and
Interviews of San Francisco
Realtors and Builders.

and costs in Tables 15 and 16 indicates that it is single-family structures and two-unit structures that are most likely to be removed for new construction of the higher density types discussed above, if such new construction is permitted under the zoning act. The new pre-proposed zoning is much more restrictive in terms of the higher density units that it allows to be built than was the pre-existing zoning. Therefore, we can expect to see fewer single-family and two-unit dwellings torn down under the new zoning than we would have under the old. In some cases, this will mean that units that would have been torn down will instead be rehabilitated under the proposed new zoning. It means, however, that if the economics of the particular neighborhood do not encourage rehabilitation, the likelihood that the same unit will be demolished and replaced with a high density structure is lessened under the proposed new zoning.

Corollary question 6 asks "What is the approximate scale of additions to the city's housing stock likely to be made over the next two decades under the pre-existing and proposed new zoning?". As indicated before, a full answer to this question could not be developed unless all of the areas in the city with the rents and market prices for structures sufficiently high to make new construction feasible are analyzed. It is clear, however, that the proposed new zoning will result in fewer additions to the city's housing stock simply because fewer sites are zoned for the type of higher density structures that are most likely to be built.

Corollary question 7 asks "What is the feasibility of building moderate income housing units under the pre-existing and proposed new zoning?". The answer to that question is quite

clear. Under neither the pre-existing nor the proposed new zoning is it feasible for the private market to build moderate income housing units. Table 17 indicates the minimum price of structures and rents per-unit for structures that can feasibly be built on \$20,000 sites in San Francisco. We are not suggesting here that there are many lots or sites that can be purchased

TABLE 17

Minimum Price of Structures and Rent Per Unit
For Structures That Can Feasibly Be Built on
a \$20,000 Site in San Francisco

<u>Prototype Number</u>	<u>Type of Structure</u>	<u>Structure Value</u>	<u>Unit Rent Per Month</u>
4	Single-Family Row	\$73,475	\$430
12	Tandem Townhouse, 3-BR	140,405	420
19	3-Unit Structure	150,100	
	3-Bedroom		350
	2-Bedroom		260
	1-Bedroom		225
27	12-Unit Structure	353,500	
	2-Bedroom		255
	1-Bedroom		225

Source: Interviews of San Francisco Realtors

for \$20,000. Furthermore, in many cases, such lots can only be developed for structures whose units will rent for less than that indicated as the minimum required rents that would permit construction to be feasible. What the table does show, however, is that construction costs are already high enough to preclude the possibility of the development of market housing that can be offered for rent or sale to moderate income households. Thus, the market is not likely to produce new housing for moderate income families, regardless of what zoning policy is adopted by the City of San Francisco.

B. IMPACT ON RENTAL AND HOUSING COSTS OF EXISTING AND NEW STRUCTURES

The second question to be answered by the study was "What is the impact of proposed new zoning regulations on rental and other housing costs for both existing and new housing?". San Francisco obviously continues to be a desirable place to live. Vacancy rates have continued to be low and both rents and prices have continued to rise. For some time they did not rise in many neighborhoods as quickly as construction costs and interest costs rose. Therefore, there was a period during which the construction of new units was dampened by factors other than the availability of construction sites. However, over the long run, the availability of sites for new construction, in neighborhoods where the market rents and prices that can be earned by new units are high enough to make such construction feasible, is the largest single constraint on new housing construction in San Francisco. The proposed new zoning regulations effectively make such sites scarcer by reducing the density, and therefore the price, that would-be builders of new units can pay for

existing units that they intend to demolish. The new structures would contain more units than the structures that their would-be builders would demolish; the net result of the proposed new zoning regulation, when taken by itself, is to decrease the amount of units that will be added to the San Francisco housing stock in the future.

Corollary question 8 asks "How does the construction of the new housing under both the pre-existing and proposed new zoning regulation affect housing rent and value levels of existing units? How does that vary according to the type of units constructed?" Additions to the supply of any heavily demanded product tend to retard the growth in the price or rent of that product. Housing is no exception to this rule. Therefore, our prediction that the proposed new zoning regulation will slow the addition of new units to the existing housing stock carries a corollary forecast that suggests the proposed new zoning regulation works indirectly to intensify the pressures for rising rents and housing prices in San Francisco. This is not to say that the city could not take other actions to offset this effect. The city could, for example, encourage the development of housing in neighborhoods that currently do not provide sites for housing, as in the northern waterfront area.

The fact that moderate and low income housing cannot be provided by new market construction is not unexpected. In fact, most low and moderate income households have always obtained housing by living in structures that were built for some higher income households. The jargon of the housing economist states that the low and moderate income segment of the American population have lived in houses that have "filtered" down, although they were built for higher income households. Over time, such units have decreased in relative price to be available for low and moderate income households. If the decrease in price is not accompanied by a decrease in quality, such filtration can be extremely beneficial. However, to preclude the decrease in quality, there must be a choice for low and moderate income households, so that they can insist upon quality before buying or renting the units that have filtered down to their price level. If, however, housing scarcity is so great that low and moderate income households must seek shelter at the price they can afford, whether or not the units are properly maintained, then quality will tend to deteriorate through investor disinvestment as the price of units drop. Housing shortage in San Francisco will make it increasingly difficult for low and moderate income households to have enough choice to be able to bargain for quality. We have already seen examples of some tenants living in units that are well below desirable or even legally acceptable standards because they simply had no other housing choice at their income. Increasing scarcity, that our study indicates is certainly not being helped by the proposed new zoning regulations, will, unless offset by other factors,

tend to encourage quality or housing condition deterioration for those segments of the housing stock that serve low and moderate income households.

To make matters worse, for those seeking shelter in the lower end of the housing price spectrum, some upward filtration seems to be taking place in San Francisco. This is desirable when viewed strictly from the perspective of housing quality. That is, some previously moderate income housing is being purchased and rented by those who can afford to pay more for the unit than can moderate and low income households. In many cases, these units are then rehabilitated or at least repaired and painted as they serve a higher income segment of the population. This type of neighborhood instability works to improve the desirability as well as physical condition of a neighborhood over time. It also tends to change the social make-up of a neighborhood.

Question 9 is another corollary to the second of the originally posed questions. It asks: "What type of ownership patterns would be encouraged under the pre-existing and proposed new zoning regulations?" Is there to be a change in the ratio of condominiums to rental units constructed under the proposed new zoning?" the indications we have received from our work to date on this subject have come mostly from our interviews with realtors and builders wherein we have attempted to get price and rental information. In many cases we have found that the prices being paid for existing single-family, two-unit and three- and four-unit structures in some of San Francisco's neighborhoods cannot be economically justified by the rents currently being charged for those units. To some degree, of course, high prices are the result of buyers expecting rents to rise in the future as housing becomes relatively more scarce. But, an even more significant reason for the apparently irrational high price is the premium that many place on the

ownership of their own unit in San Francisco. Not only do buyers pay a premium over the capitalized value of obtainable rents when purchasing single-family houses, but they also pay a premium to be able to own structures with two, three or four units in them, one of which they occupy. One reason for this is, of course, the fact that our tax laws are written to provide the owner of his own housing unit with significant advantages. Still another is the previously mentioned expectation that inflation and other factors will cause future housing prices to rise.

We have seen that the gross rent multiplier of housing in San Francisco (that is, the relationship between rent and purchase price) goes down as the number of units in a structure grows larger. In some neighborhoods, knowledgeable real estate experts have given us examples of two- and three-unit structures selling for eleven, twelve and even thirteen times the gross rental that is currently being charged for the units within these structures. On the other hand, interviews that we conducted during the course of the study being reported on here indicated that, very frequently, large twelve-unit apartment houses did not sell for more than between 8.5 and 9.5 times their gross rental. Simply put, the evidence suggests that you can get more per square foot of unit by selling to someone who is going to live in the unit than by selling the unit to someone who is not going to live in the structure, but merely wants to own the property as an investment. This being the case, we can expect to see a continued increase in the construction of condominium and other owner-occupied units relative to the construction of rental units. This is likely to be the case under pre-existing as well as new zoning. However, since the new zoning tends to shrink the number of high density units that can be built, its impact on rental units is conceived as perhaps slightly more adverse than the pre-existing zoning, though we do not feel that much difference can be attributed to each zoning regulation with regard to this issue.

C. IMPACT UPON LAND VALUES OF PROPERTY TAXES

The third question that our study attempted to answer was "What is the impact of the proposed new zoning regulations on land values and property taxes?". The value of every property in San Francisco can be estimated from two perspectives. Each property has a value based on its present use. In a simple case, this value is the market price or capitalized rental value that would be paid by someone who wishes to use the property as it is being used at the present time. For a single-family house this is simply the price that the house can be expected to bear if it is offered for sale on the market. When viewed from this perspective, the question of how much the property value is to be assigned to the land and structure is fairly academic, though one could say that the price of the land would be equal to the amount that one would obtain by estimating the value of the structure if it were portable within the same neighborhood, subtracting that amount from the total value of the property.

A second perspective on value is one that stems from the opportunity of using any property for another use. In this case, the value of any property is the price that would be paid by an investor planning to utilize that property as a site for its "highest and best real-estate use". Thus, if the previously discussed single-family house could be used as a site for a type 27 high-density apartment house in one of the neighborhoods of Russian Hill, then the single-family house would be worth \$494,100 when viewed from this second perspective. Assessors tend to take the second or highest and best use perspective when they appraise a property for tax purposes.

Thus, the value of many San Francisco units, in zones that would permit an increased intensification of density, are assessed at land values that consider the potential of the

property for such a reuse. Since the proposed new zoning ordinance decreases the number of existing structures that can legally be converted to feasible high density use, it tends to work to reduce the value of some structures. Also, of course, since the total amount of new construction is likely to be less in future years under the proposed new zoning regulations than it would be under the previous zoning, the number of apartments and flats likely to be added to the city's tax rolls will be less under the proposed new zoning regulations than it would be under the pre-existing ones. In 1975, apartments and flats in San Francisco had a value of 797,963,437 or approximately 29.3% of the city's assessment base. Single-family dwellings had a value of 791,152,612 or approximately 29.0% of the city's assessment base. The use value of single-family houses is likely to rise under the proposed new zoning, more quickly than it would under the pre-existing zoning. This is because the incentive to hold single-family houses for conversion to higher density units will be diminished as the proposed zoning decreases the opportunities for such conversion. Thus, some single-family houses will be well maintained and rehabilitated where they might otherwise have been allowed to run down because their owners expected them to be sold as a site for higher density use. Furthermore, the encouragement of housing rent and price increases being slightly greater under the proposed new zoning, will also work to increase the tax base.

We will have to continue the analysis conducted to date throughout all of San Francisco's neighborhoods to be able to make a very accurate estimate of the net effect that could be expected from the counteracting forces described above. However, it is likely that the overall effect of the proposed new regulations, if taken by themselves, will be to result in more slowly increasing assessment value for the housing sector of the city's tax base than would have been the case in the pre-existing zoning. Furthermore, it is quite clear that land values, by themselves, will tend to be lower under the proposed new zoning.

APPENDIX A

LIST OF QUESTIONS LIKELY TO BE ASKED BY REPRESENTATIVES OF PUBLIC AND PRIVATE CITIZENS' GROUPS CONCERNING THE ECONOMIC IMPACTS OF THE REVISED ZONING REGULATIONS

A. IMPACTS THAT ARE ANALYZED IN PART IV OF THIS REPORT

1. What is the impact of the new residential zoning regulations on the ability to produce new housing in San Francisco, particularly for disadvantaged households?
2. What is the impact of proposed new zoning regulations on rental and other housing costs for both existing and new housing?
3. What is the impact of the proposed new zoning regulations on land values and property taxes?

B. COROLLARY QUESTIONS THAT ARE ANSWERED IN PART IV OF THIS REPORT

4. What types of units will be built under the pre-existing and proposed new zoning? This includes the number of units per-structure as well as the number of bedrooms per-unit.
5. What type of units that are already built will be removed or rehabilitated under the pre-existing and proposed new zoning?
6. What is the approximate scale of additions to the city's housing stock likely to be made over the next two decades under the pre-existing and proposed new zoning?
7. What is the feasibility of building moderate-income housing units under the pre-existing and proposed new zoning?
8. How does the construction of new housing under both the pre-existing and proposed new zoning regulations affect housing rent and value levels of existing units? How does that vary according to the type of units constructed?
9. What types of ownership patterns would be encouraged under the pre-existing and proposed new zoning regulations? Is there to be a change in the ratio of condominiums to rental units constructed under the proposed new zoning?

APPENDIX B

NINETEEN TYPES OF HOUSING STRUCTURES

10. What is the net effect of the changes in zoning regulations upon land values and property taxes?

C. QUESTIONS THAT ARE NOT ANSWERED IN THIS REPORT

11. What types of demands are served under the pre-existing zoning controls and how will they be impacted by the proposed new zoning regulations?
12. Will the zoning changes have an effect on the quality of San Francisco's housing stock? If so, what type of units and neighborhoods are likely to be affected?
13. Will the zoning changes have an effect on neighborhood stability?
14. What type of neighborhoods are most likely to accept design controls in lieu of an increase in housing density?
15. What housing programs or policies would help to mitigate any undesirable results of the proposed new zoning regulations?
16. How could the proposed new zoning regulations be changed to help mitigate any undesirable results?

1-3BR, 1 BA
1200 sq. ft.

25 x 50

One story above parking

TYPE 1

TENANT FEATURES

- Entry: private
- Open Space: private rear yard
- Room Sizes: ample
- Sunlight & Exposure: good
- Dining Area: separate room
- Family Room: no
- Unit Character: house-like

DEVELOPMENT FEATURES

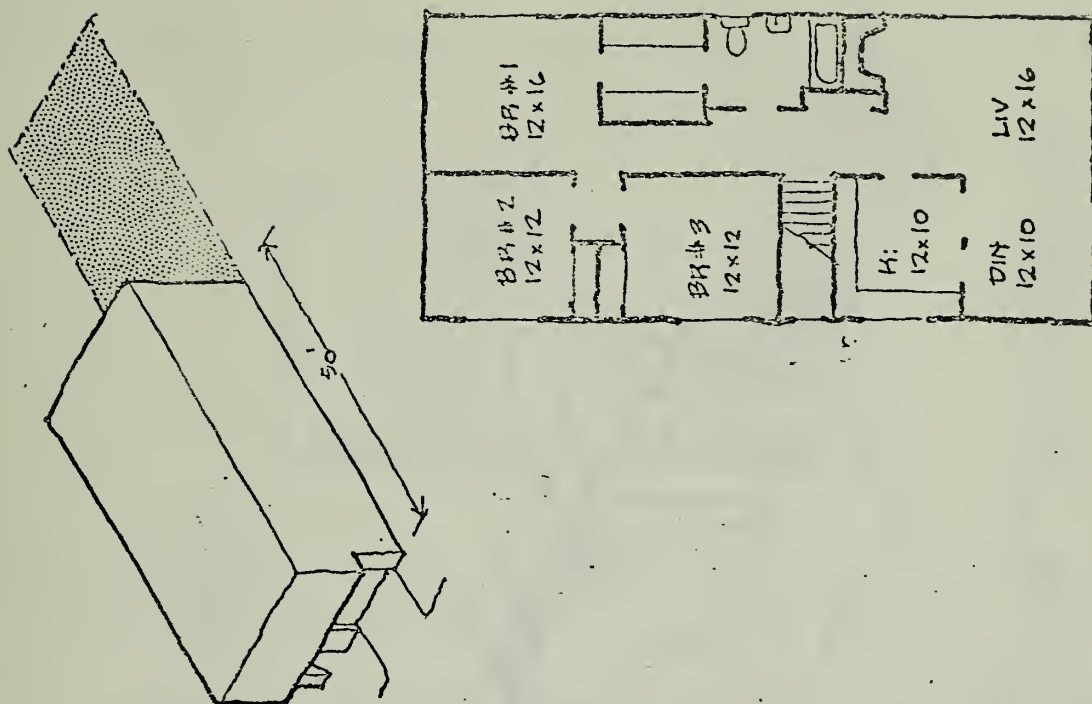
- Construction: simple section
- Perimeter Ratio: low
- Circulation Efficiency: good
- Mother-In-Law Unit Possibility: yes.

URBAN DESIGN FEATURES

- Height: 20'
- Facade Modulation: 25' module
- Curb Cut: 10' per lot
- Character: house-like

MINIMUM LOT SIZE

100' lot with 55% lot coverage and above



UNITS

- 3BR, 2BA House-1750 sq. ft OR
- 4BR, 2BA House-2000 sq ft

TENANT FEATURES

- Entry: private
- Open Space: private; next to unit
- Room Sizes: ample
- Sunlight & Exposure: good
- Dining Area: separate space
- Family Room: no
- Unit Character: house-like

DEVELOPMENT FEATURES

- Construction: simple section
- Perimeter Ratio: medium
- Circulation Efficiency: good
- Mother-In-Law Unit Possibility: no

URBAN DESIGN FEATURES

- Height: 20' at street
- Facade Modulation: 25' detached
- Curb Cut: 10' cut 25'
- Character: house-detached

MINIMUM LOT SIZE

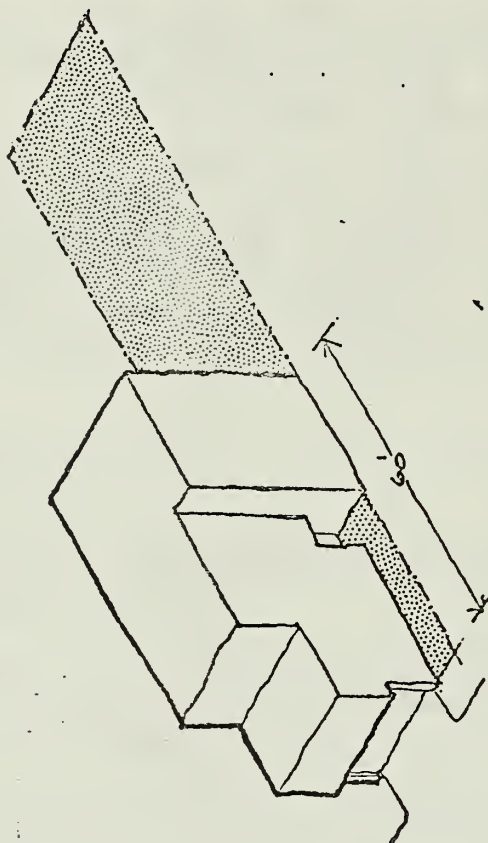
- 120' lot with 55% lot coverage
- 100' lot with 60% lot coverage
- 112' lot with 55% lot coverage

LOT COVERAGE

25 x 60

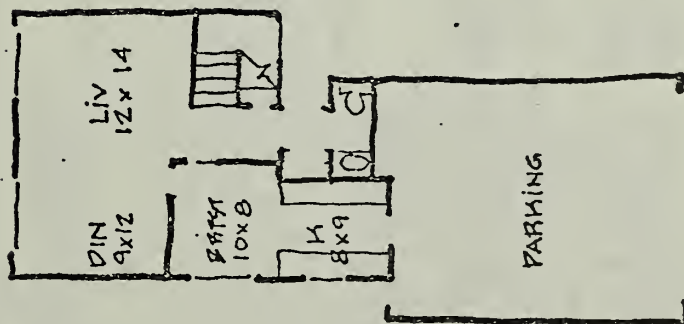
Single Family
2 stories with garage
in front

TYPE 2

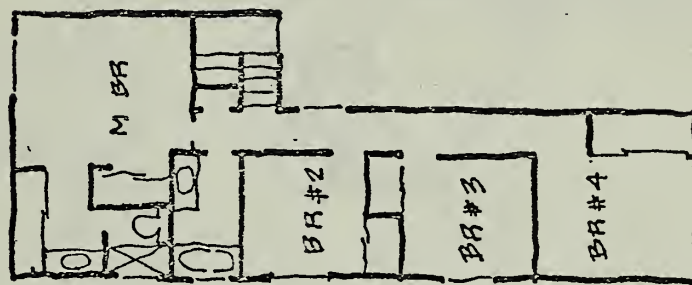


LOT COVERAGE
25 x 60
Single Family

TYPE 2

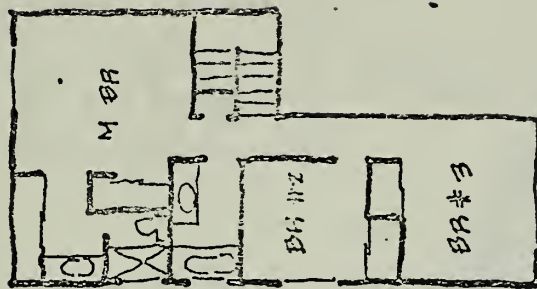


GROUND LEVEL



SECOND LEVEL
(4BR, 2BA House)

OR



SECOND LEVEL
(3BR, 2BA House)

UNITS

1-3 BR, 2 BA
1250 sq. ft.

TENANT FEATURES

- Entry: private
- Open Space: private, rear yard
- Room Sizes: ample
- Sunlight & Exposure: good, except for 3rd BR
- Dining Area: separate room
- Family Room: none
- Unit Character: flat-like

DEVELOPMENT FEATURES

- Construction: simple section
- Perimeter Ratio: low
- Circulation Efficiency: good
- Mother-In-Law Unit Possibility: yes

URBAN DESIGN FEATURES

- Height: 20'
- Facade Modulation: 25'-module
- Curb Cut: 10-per lot
- Character: house

MINIMUM LOT SIZE

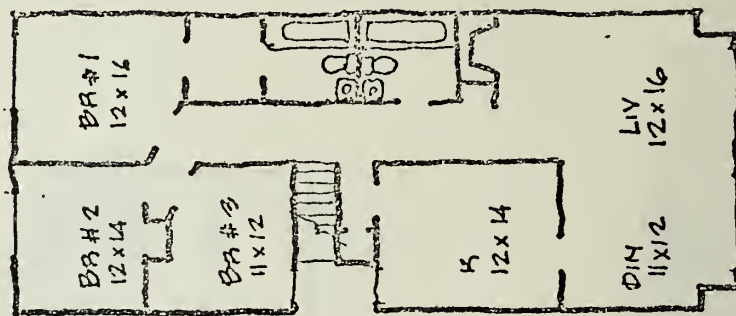
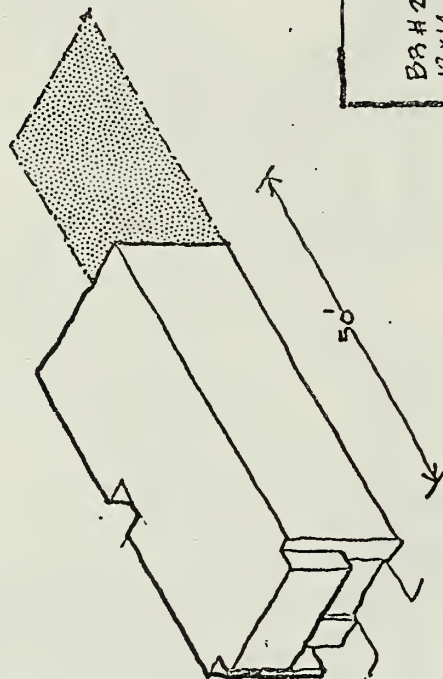
100' lot with 55% lot coverage and above

LOT COVERAGE

25 x 50

One story above parking

TYPE 4



3 BR, 2BA House
2100 sq ft

20 x 55
Single Family House
2 stories above garage

TYPE 6

TENANT FEATURES

- Entry: private
- Open Space: private open space next to unit
- Room Sizes: ample
- Sunlight & Exposure: good
- Dining Area: separate room
- Family Room: breakfast room
- Unit Character: house-like

DEVELOPMENT FEATURES

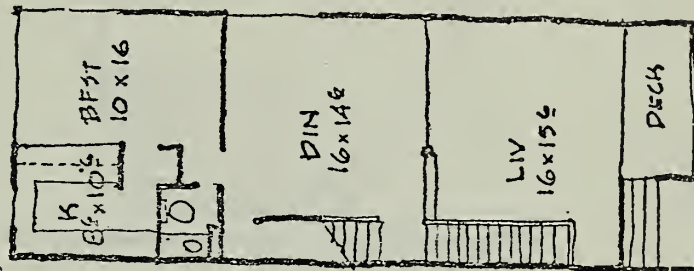
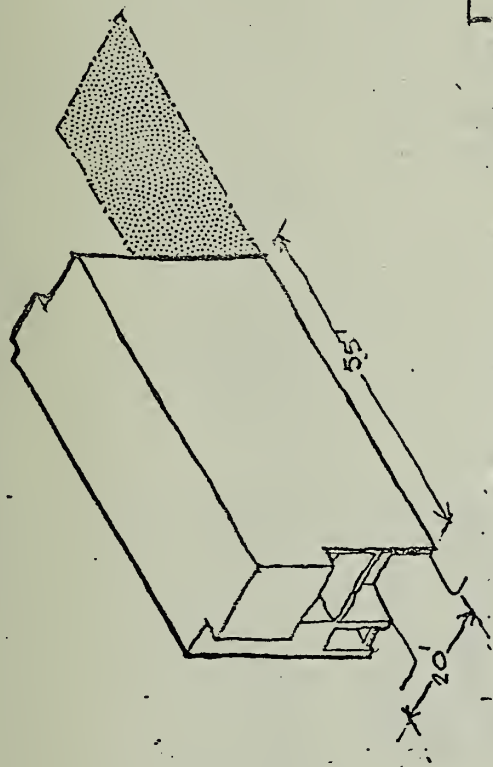
- Construction: simple section
- Perimeter Ratio: medium
- Circulation Efficiency: good, separate interior stair
- Mother-In-Law Unit Possibility: yes

URBAN DESIGN FEATURES

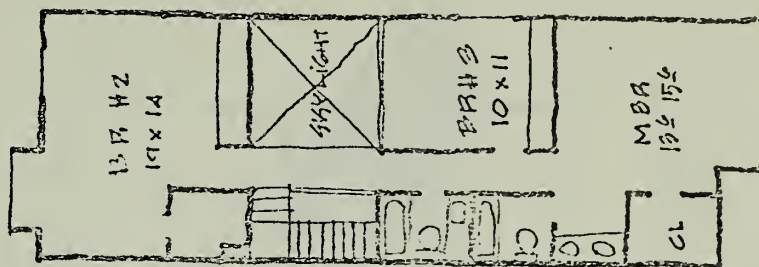
- Height: 30' at street
- Facade Modulation: 20' module
- Curb Cut: 10' cut per 20'
- Character: row house

MINIMUM LOT SIZE

100' lot with 55% lot coverage



FIRST FL.



SECOND FL.

UNITS

3BR, 1-1/2BA House
1900 sq ft

LOT COVERAGE

25' x 50'

Single Family

2 stories over parking

TYPE 7

TENANT FEATURES

- Entry: private
- Open Space: private, open space next to unit
- Room Sizes: ample
- Sunlight & Exposure: minimal
- Dining Area: separate room
- Family Room: breakfast room.
- Unit Character: house-like

DEVELOPMENT FEATURES

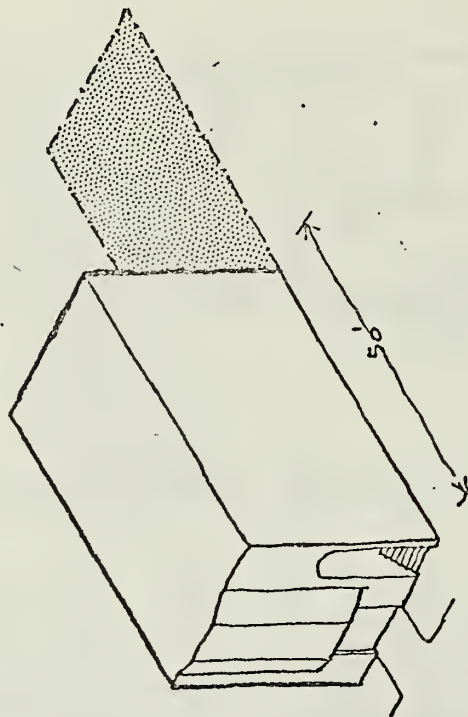
- Construction: simple section
- Perimeter Ratio: medium
- Circulation Efficiency: medium
- Mother-In-Law Unit Possibility: yes.

URBAN DESIGN FEATURES

- Height: 30'
- Facade Modulation: 25' wide module
- Curb Cut: 10' cut per 25'
- Character: row house

MINIMUM LOT SIZE

100' lot with 55% lot coverage and above



LOT COVERAGE

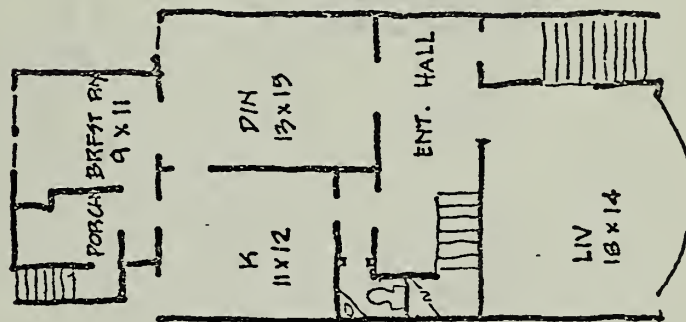
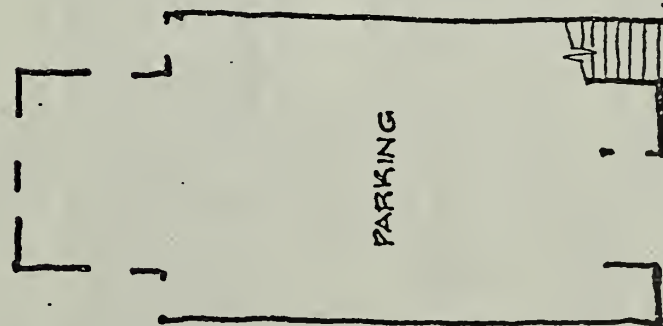
25 x 50

Single Family

2 stories over parking

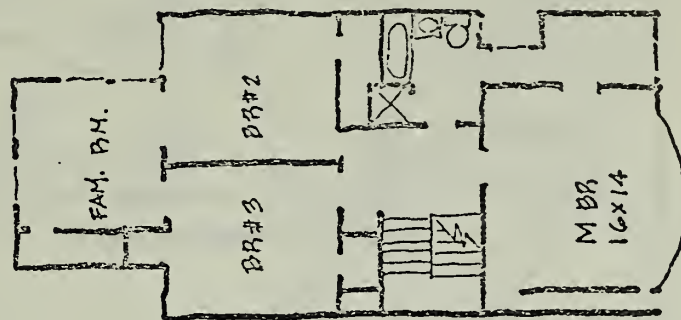
TYPE

7



PARKING

FIRST FL.



SECOND FL.

UNITS

2-3BR, 2BA flats -.1200 sq ft ea

LOT COVERAGE: 25 x 55

2 Conventional Flats

2 Stories above parking

TENANT FEATURES

- Entry: common exterior stairway
- Open Space: common rear yard, not next to units
- Room Sizes: small
- Sunlight & Exposure: minimal
- Dining Area: with kitchen
- Family Room: no
- Unit Character: flat

DEVELOPMENT FEATURES

- Construction: stacked framing & plumbing, simple section
- Perimeter Ratio: low
- Circulation Efficiency: good, shared stairway
- Mother-in-Law Unit Possibility: yes, 375 sq ft next to rear yd

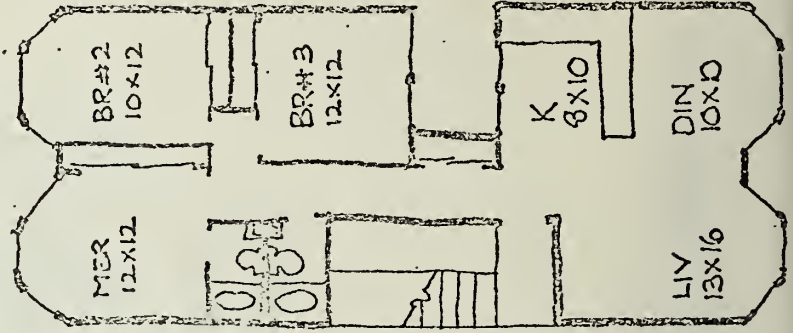
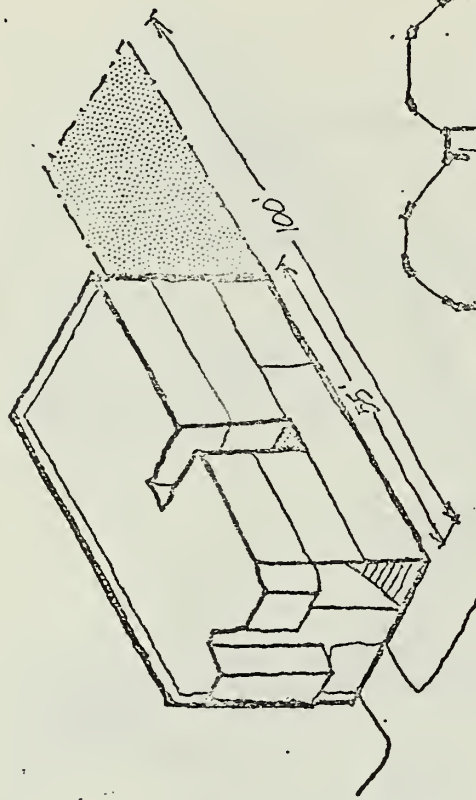
URBAN DESIGN FEATURES

- Height: 30'
- Facade Modulation: 25' module
- Curb Cut: 10' cut per 25'
- Character: flats

MINIMUM LOT SIZE

-100' lot with 55% lot coverage

TYPE 10



2-3BR, 2 BA flats - 1400 sq ft

2 Conventional flats
2 Stories above parking

TENANT FEATURES

- Entry: common exterior stairway
- Open Space: common rear yard, not next to any unit
- Room Sizes: ample
- Sunlight & Exposure: minimal
- Dining Area: separate room
- Family Room: no
- Unit Character: flat

DEVELOPMENT FEATURES

- Construction: stacked framing & plumbing, simple section
- Perimeter Ratio: low
- Circulation Efficiency: good, shared stairways
- Mother-in-Law Unit Possibility: yes, 625 sq ft next to rear yd.

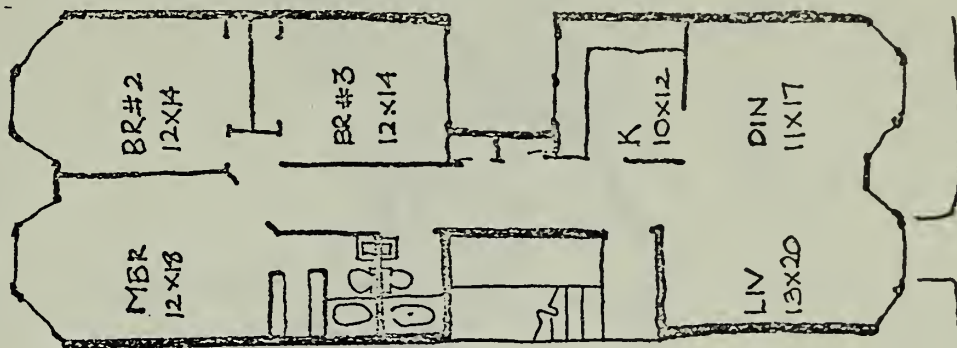
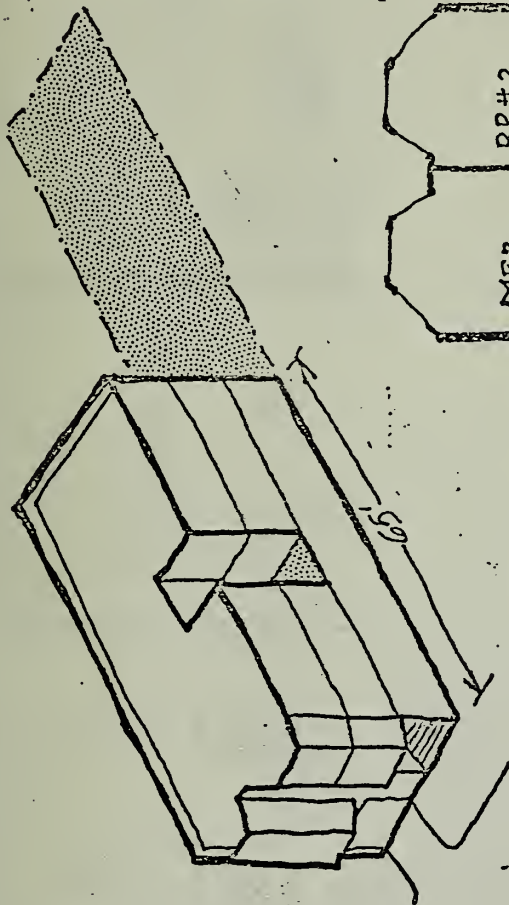
URBAN DESIGN FEATURES

- Height: 30', 20' at rear yard
- Facade Modulation: 25' module
- Curb Cut: 10' cut per 25'
- Character: flats

MINIMUM LOT SIZE

- 100' lot with 65% lot coverage
- 112' lot with 60% lot coverage
- 120' lot with 55% lot coverage
- 137.5' lot with 55% lot coverage

TYPE 11



UNITS

2-3BR, 2BA, 2 story townhouses

- Front Unit - 1300 sq ft
- Rear Unit - 1400 sq ft

LOT COVERAGE: 25 x 75

2 Tandem Townhouses

- Front Unit above parking
- Rear Unit at grade

TYPE 12

TENANT FEATURES

- Entry: private from st. to unit
- Open Space: private next to unit
- Room Sizes: ample
- Sunlight & Exposure: good
- Dining Area: separate room
- Family Room: yes
- Unit Character: house-like

DEVELOPMENT FEATURES

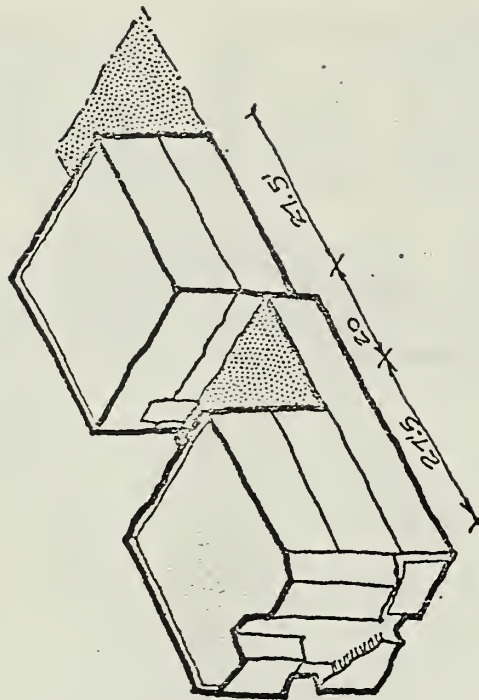
- Construction: non-stacked framing & plumbing, 2 story units
- Perimeter Ratio: medium
- Circulation Efficiency: medium, separate stairs within units
- Mother-in-Law Unit Possibility: No

URBAN DESIGN FEATURES

- Height: 30' at St, 20' at rear
- Facade Modulation: 25' module
- Curb Cut: 10' cut per 25'
- Character: townhouse

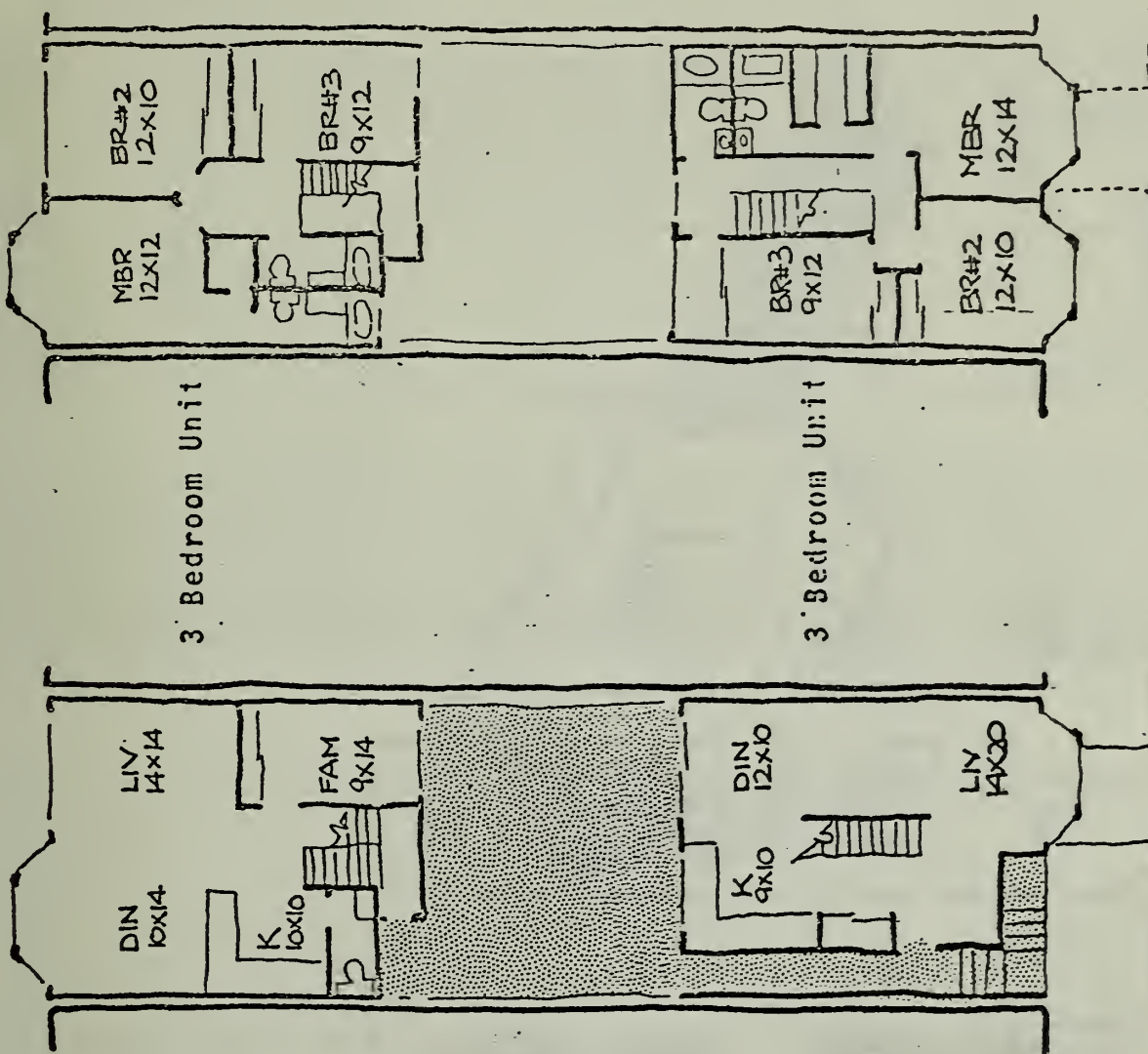
MINIMUM LOT SIZE

- 100' lot with 75% lot coverage
- 112' lot with 70% lot coverage
- 120' lot with 60% lot coverage
- 137.5' lot with 55% lot coverage



- Front Unit above parking
- Rear Unit at grade

TYPE 12



Courtyard Level

Upper Level

UNITS

2-3BR, 2BA, 2 Story Railroad
1400 sq ft

LOT COVERAGE: 25 x 60
2 Railroad Houses

TENANT FEATURES

- Entry: Private from street
- Open Space: Private next to unit
- Room Sizes: Ample
- Sunlight and Exposure: good
- Dining Area: Separate Space
- Family Room: Yes
- Unit Character: 2 Story House

DEVELOPMENT FEATURES

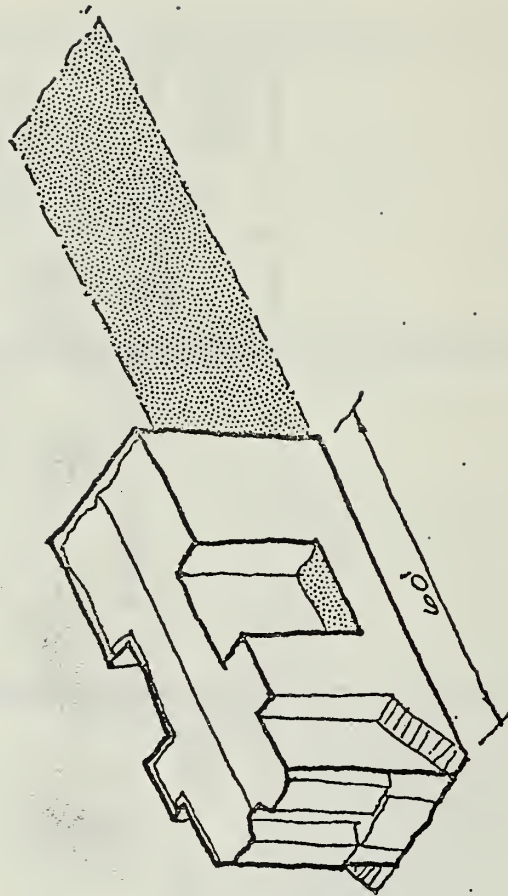
- Construction: Non-stacking framing and plumbing
- 2 Story Units
- Perimeter Ratio: Medium
- Circulation Efficiency: good
- Mother-in-Law Unit Possibility: Yes

URBAN DESIGN FEATURES

- Height: 30'
- Facade Modulation: 12.5 module
- Curb Cut: 10' cut per 25'
- Character: Townhouse

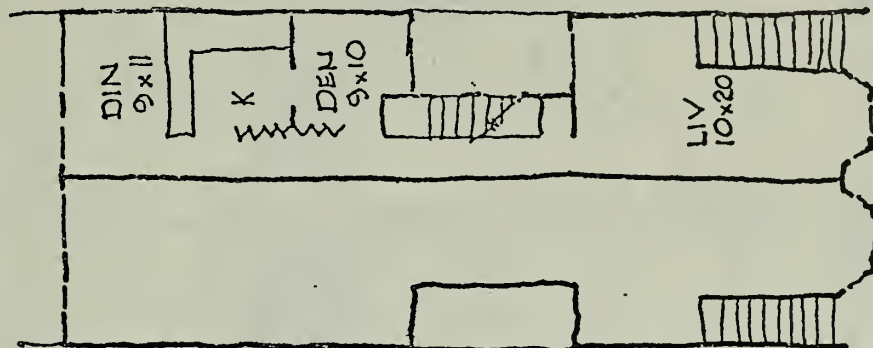
MINIMUM LOT SIZE

100' lot with 60% Coverage
112' lot with 55% coverage and above

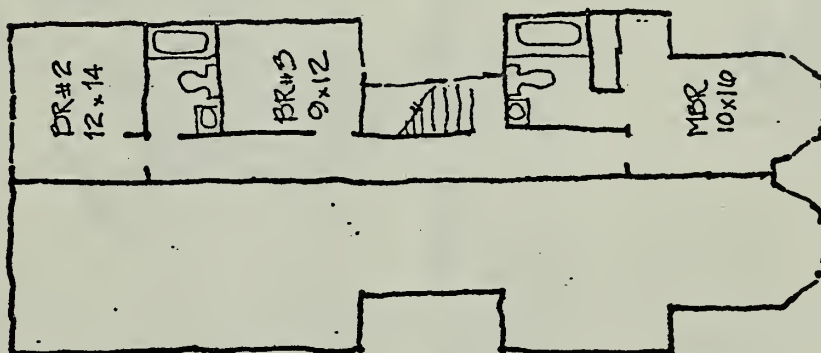


TYPE 14

TYPE 14



Courtyard Level



Upper Level

UNITS

3-3BR, 2BA, 3 story- 1500 sq ft
 3-2BR, 2BA, 2 story- 1200 sq ft

TENANT FEATURES

- Entry: front unit-private frm St.
 rear units-private frm courtyd.
- Open Space: private next to units
- Room Sizes: ample
- Sunlight & Exposure: good
- Dining Area: separate space
- Family Room: yes
- Unit Character: house-like,
 2 story/3story

DEVELOPMENT FEATURES

- Construction: non-stacking
 framing & plumbing-2 story
 units
- Perimeter Ratio: medium
- Circulation Efficiency: medium -
 separate interior stairs,
 shared fire egress
- Mother-in-Law Unit Possibility: No

URBAN DESIGN FEATURES

- Height: 30' at street, 30' at
 rear yard
- Facade Modulation: 16' module
- Curb Cut: 10' cut per 50'
- Character: townhouse

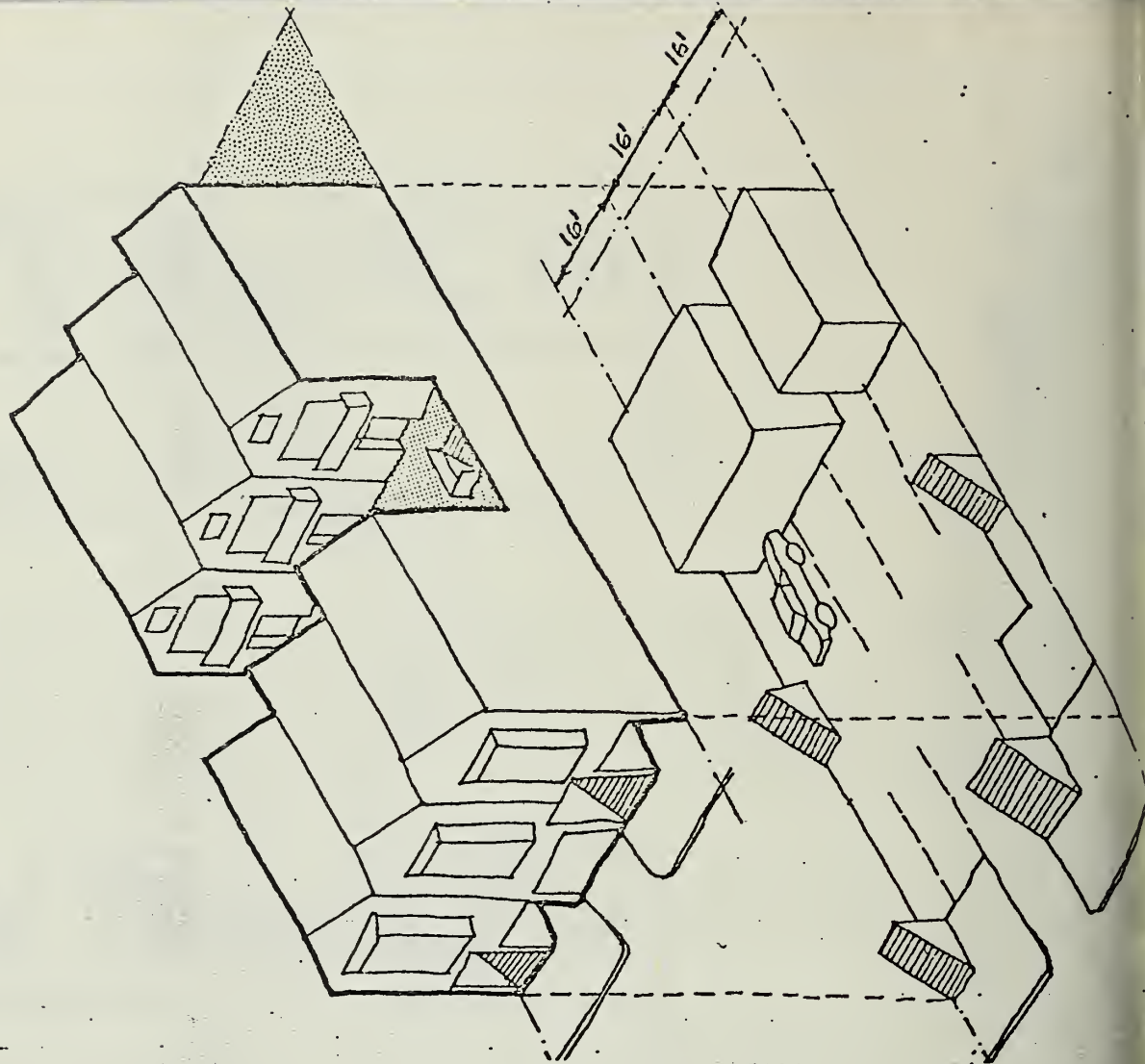
MINIMUM LOT SIZE

- 120' lot with 75% coverage
- 137.5' lot with 65% coverage

LOT COVERAGE: 50 x 90

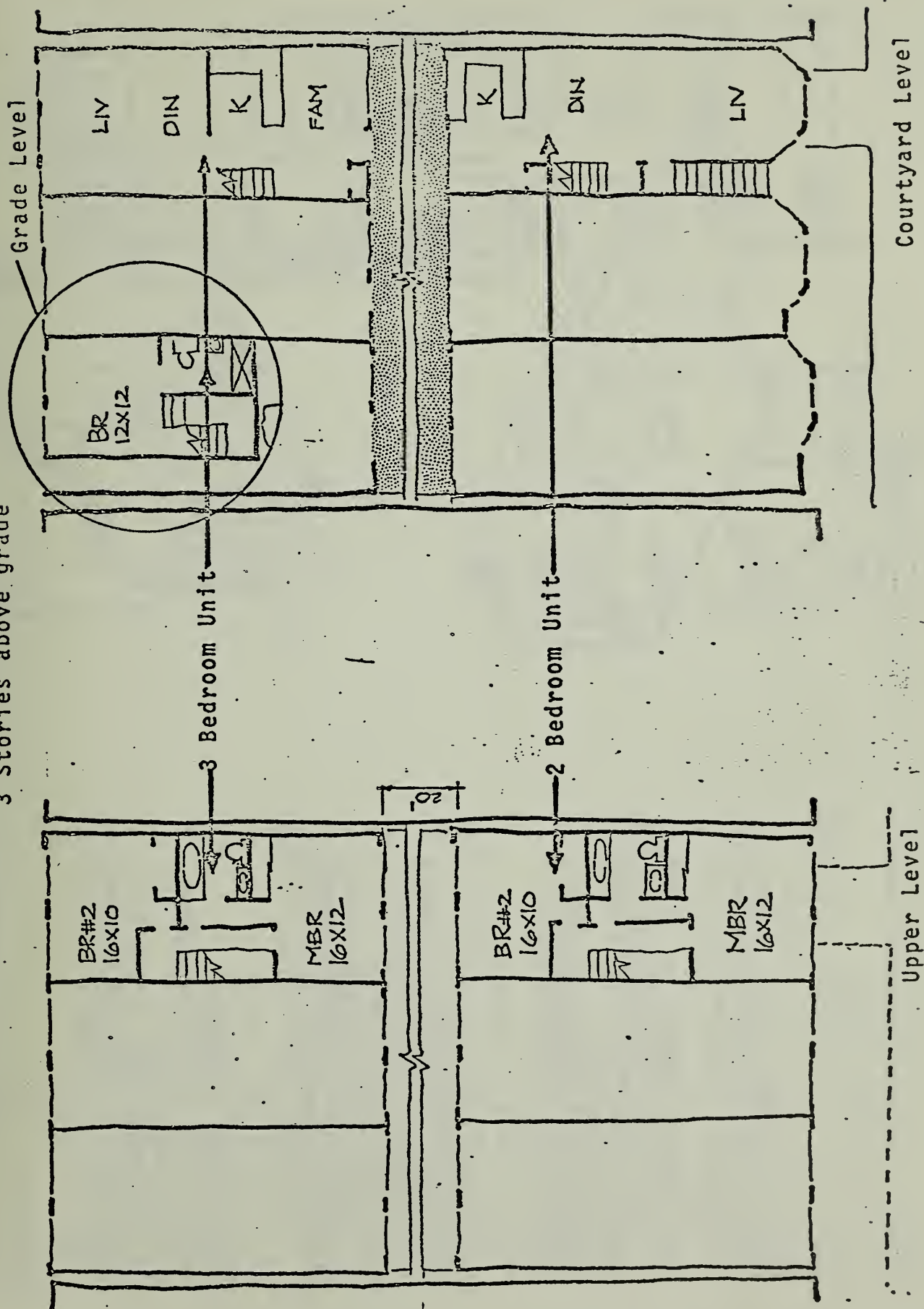
- 6 Tandem Units
- 3 Front Units
- 2 Stories above parking
- 3 Rear Units
- 3 Stories above grade

TYPE 15



- 3 Front Units
- 2 Stories above parking
- 3 Rear Units
- 3 Stories above grade

TYPE 15



UNITS

- 2-3BR, 2BA-1400 sq. ft.
- 2 stories above grade
- Rear studio size varies with size of lot

TENANT FEATURES

- Entry: common exterior stairway; private passageway to rear unit
- Open Space: common rear yard; next to grade rear unit & common roof deck above
- Room Sizes: ample
- Sunlight & Exposure: minimal
- Dining Area: with kitchen
- Family Room: no
- Unit Character: flat-like

DEVELOPMENT FEATURES

- Construction: stacked framing & plumbing; simple section
- Perimeter Ratio: Medium to low
- Circulation Efficiency: good; shared stairs & fire egress
- Mother-In-Law Unit Possibility: No (Extra unit replaces M.I.L. possibility)

URBAN DESIGN FEATURES

- Height: 30' at street; 10' at rear yard
- Facade Modulation: 25' module
- Curb Cut: 10' cut per 25' req.
- Character: flat-RH-2

MINIMUM LOT SIZE

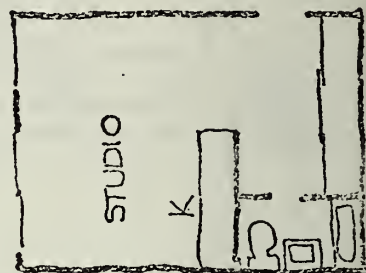
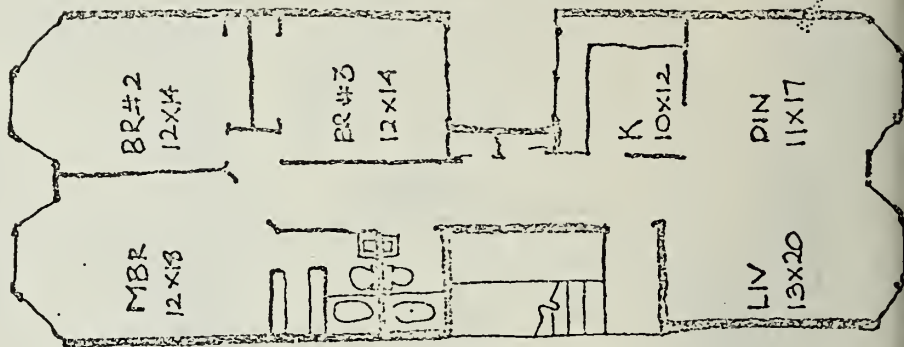
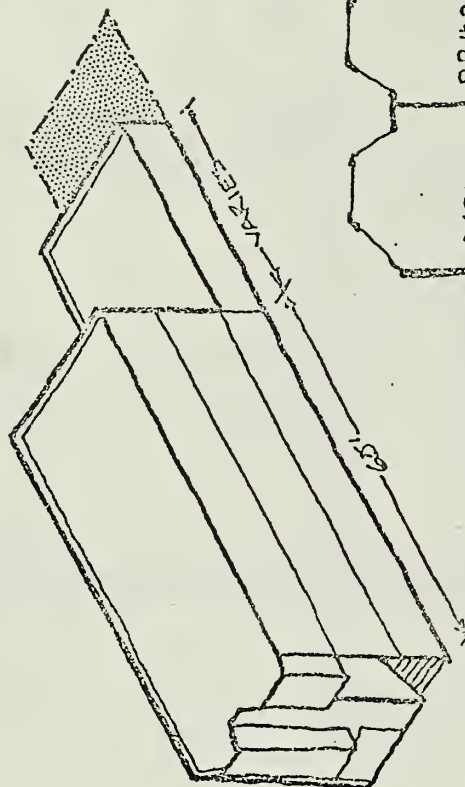
- Project Coverage
- 55% lot size and presently allowable TOSA
- plus 10' TOSA not contingent on adjacent lot coverage

LOT COVERAGE

Conventional project plus 10' high TOSA

TYPE

16



Studio Unit

2-3BR, 2BA-1400 sq. ft.
1-2BR, 1BA-900 sq. ft.
Top unit set back in relation to slope & street

TENANT FEATURES

- Entry: common exterior stairway
- Open Space: common rear yard; not next to units
- Room Sizes: ample
- Sunlight & Exposure: minimal
- Dining Area: separate
- Family Room: no
- Unit Character: flat

DEVELOPMENT FEATURES

- Construction: stacked framing & non-stacked plumbing
- Perimeter Ratio: low
- Circulation Efficiency: good; shared interior stairway & fire egress
- Mother-In-Law Unit Possibility: No

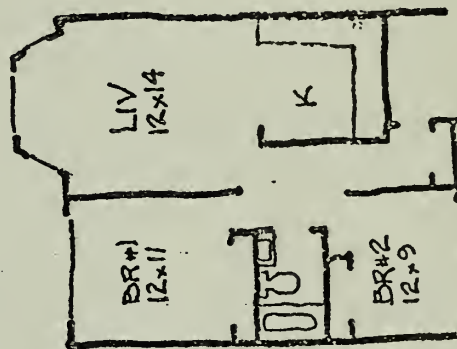
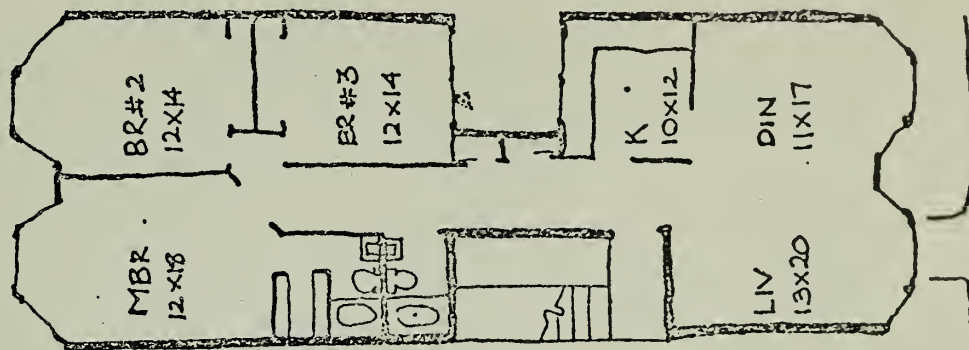
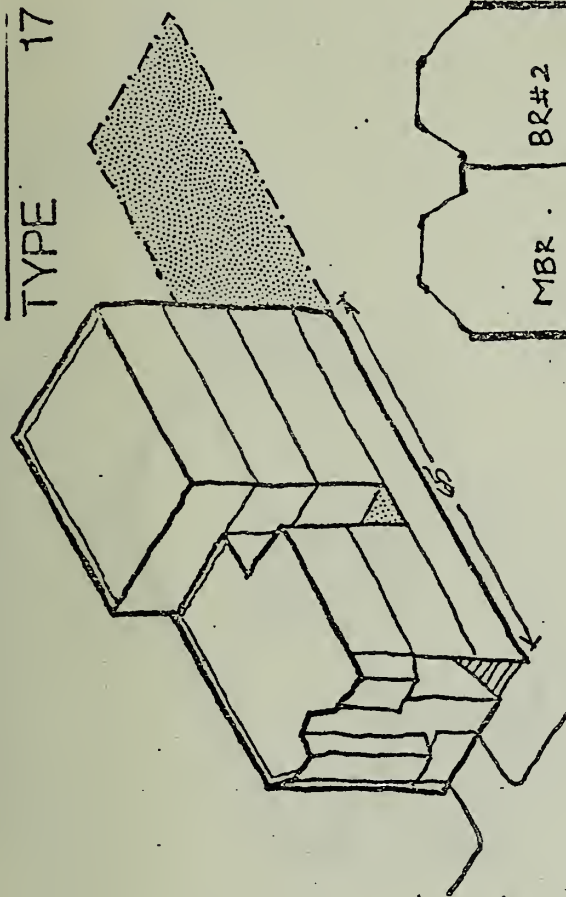
URBAN DESIGN FEATURES

- Height: 30' at street; 40' at rear yard
- Facade Modulation: 25' module
- Curb Cut: 10' cut per 25' req.
- Character: flat-RH-2

MINIMUM LOT SIZE

100' lot w/	65% lot coverage
112' lot w/	60% lot coverage
120' lot w/	55% lot coverage

TYPE 17



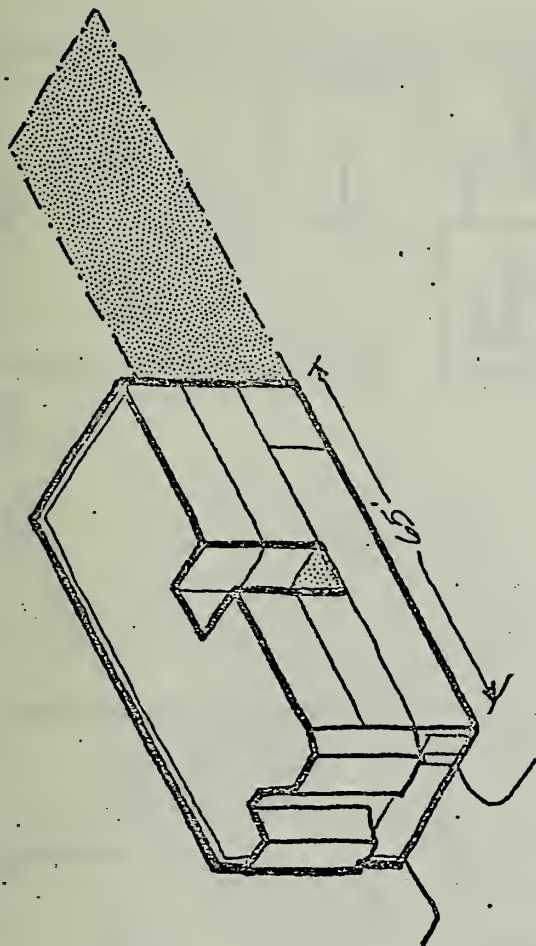
Additional Unit

Conventional Units

1-3BR, 2BA- 1400 sq ft
 1-2BR, 1BA- 900 sq ft
 1-1BR, 1BA- 750 sq ft

3 Conventional Units
 2 Stories above parking

TYPE 19



TENANT FEATURES

- Entry: common lobby, stair (& elevator)
- Open Space: common rear yard
- Room Sizes: ample
- Sunlight & Exposure: minimal
- Dining Area: separate room
- Family Room: no
- Unit Character: flat

DEVELOPMENT FEATURES

- Construction: non-stacked framing & plumbing, single section
- Perimeter Ratio: low
- Circulation Efficiency: good, shared stairway & fire egress
- Mother-in-Law Unit Possibility: yes, 250 sq ft

URBAN DESIGN FEATURES

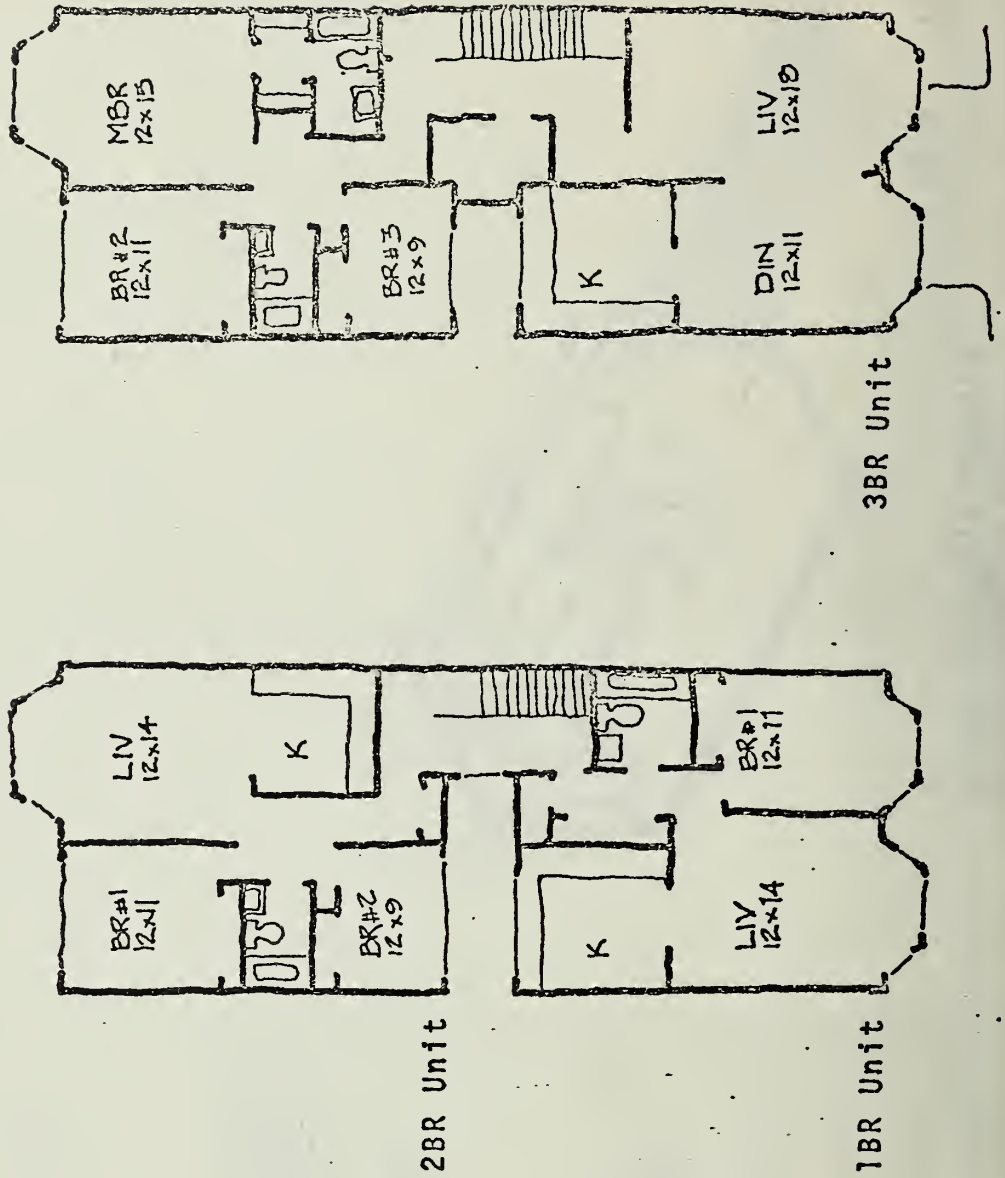
- Height: 30'
- Facade Modulation: 25' module
- Curb Cut: 20' cut per 25'
- Character: small apt.

MINIMUM LOT SIZE

- 100' lot with 65% lot coverage
- 112' lot with 60% lot coverage
- 120' lot with 55% lot coverage & above

LOT COVERAGE: 25 x 65
 3 Conventional Units
 2 Stories above parking

TYPE 19



3-3BR, 2BA flats - 1200 sq ft ea

3 Conventional flats
3 Stories above parking

TYPE 20

TENANT FEATURES

- Entry: common lobby with elevator or stair
- Open Space: common rear yard, not next to any units
- Room Sizes: small
- Sunlight & Exposure: minimal
- Dining Area: with kitchen
- Family Room: no
- Unit Character: flat

DEVELOPMENT FEATURES

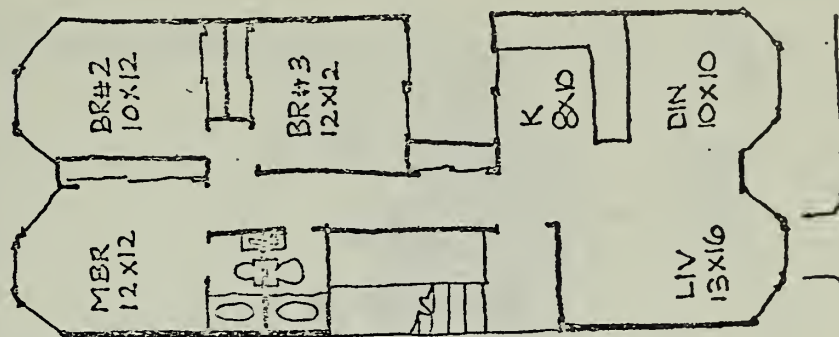
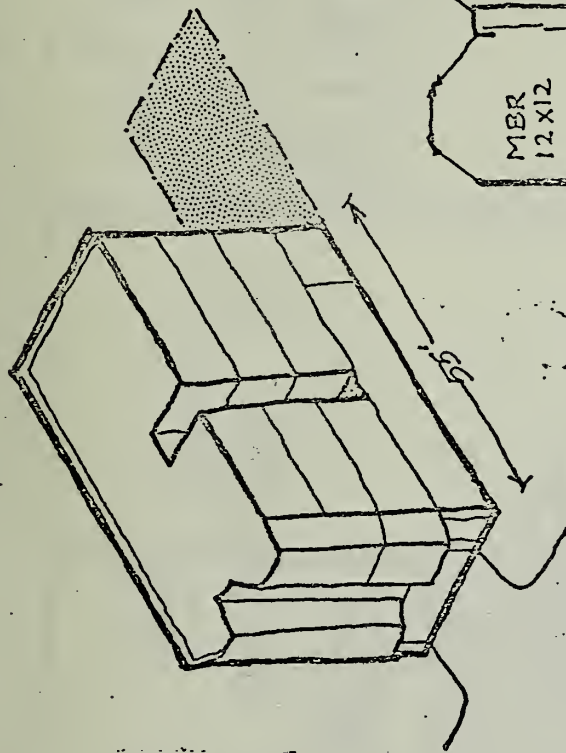
- Construction: stacked framing & plumbing, simple section
- Perimeter Ratio: low
- Circulation Efficiency: good, shared stairway & fire egress (medium, w/separate stairs)
- Mother-in-Law Unit Possibility: No

URBAN DESIGN FEATURES

- Height: 40'
- Facade Modulation: 25' module
- Curb Cut: 20' cut per 25'
- Character: small apt.

MINIMUM LOT SIZE

- 100' lot with 55% lot coverage & above



UNITS

- 2-3BR, 2BA, 2 story units
1450 sq ft
- 1 Studio 500 sq ft

TENANT FEATURES

- Entry: front unit, private St. entry, 2 rear units shared courtyard entry
- Open Space: shared courtyard & rear yard
- Room Sizes: ample
- Sunlight & Exposure: good
- Dining Area: with kitchen
- Family Room: yes
- Unit Character: 3BR units - 2 story house-like

DEVELOPMENT FEATURES

- Construction: non-stacked framing & plumbing, 2 story units
- Perimeter Ratio: medium
- Circulation Efficiency: medium, separate interior stairs, shared fire egress
- Mother-in-Law Unit Possibility: No

URBAN DESIGN FEATURES

- Height: 30' at St.,
- Facade Modulation: 25' module
- Curb Cut: 10' cut per 25'
- Character: townhouse

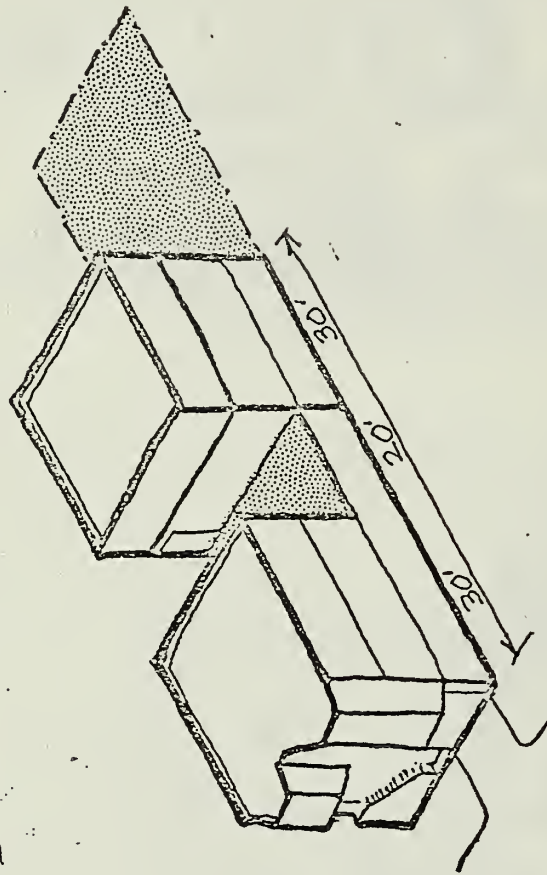
MINIMUM LOT SIZE

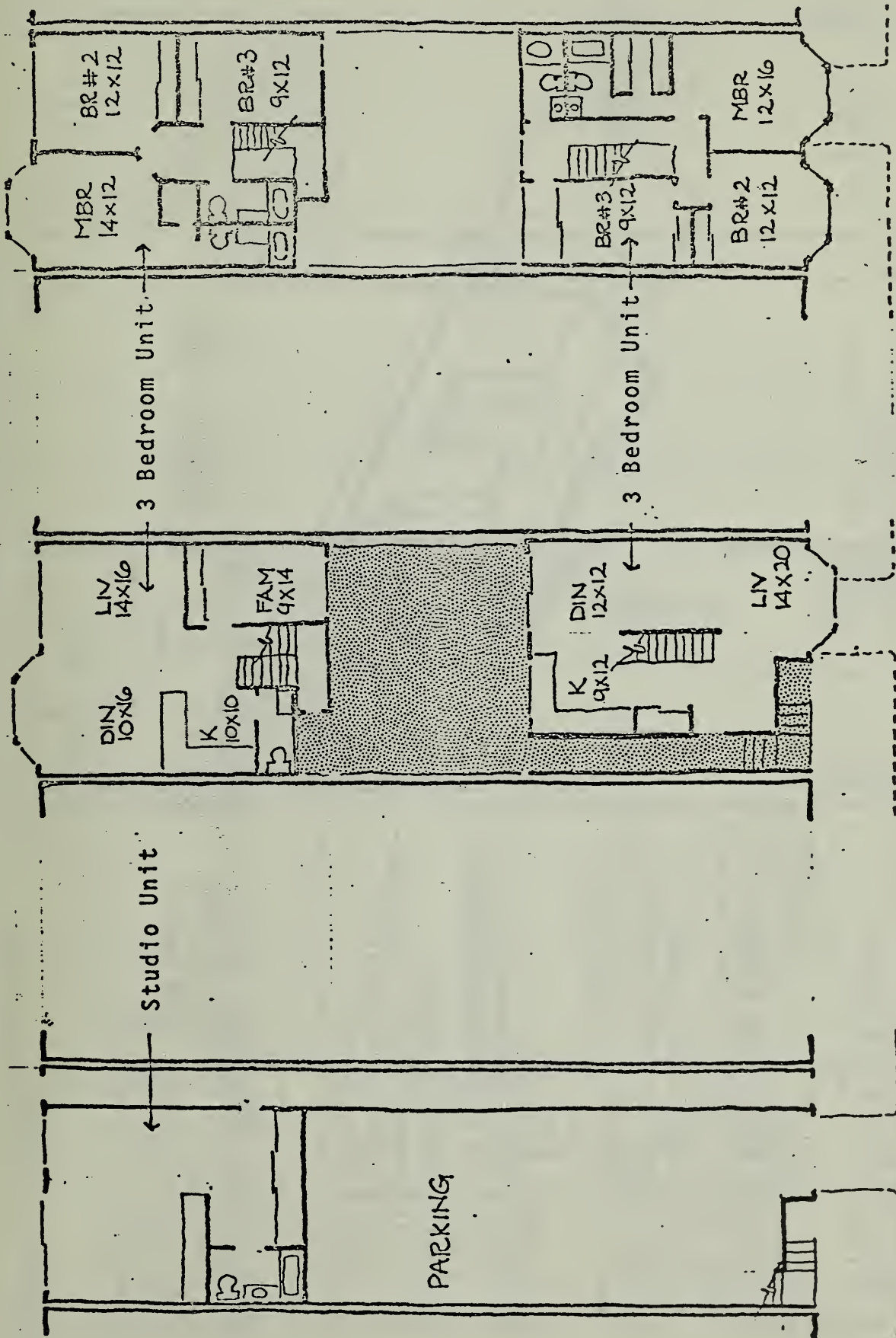
- 112' lot with 75% lot coverage
- 120' lot with 70% lot coverage
- 137.5' lot with 60% lot coverage

LOT COVERAGE: 25 x 80

- 3 Tandem Units
- Front Townhouse above parking
- 2 Rear Units Stacked at grade

TYPE 22





UNITS

- 2-3BR, 2BA, 2 Story Railroad House
1400 sq ft
- 2-2BR, Study, 1BA, 2 Story
1100 sq ft

Lot Coverage: 25 x 100

(with 20' court at grade)

2-Railroad Houses

1-Small Mews Cottage

TYPE 24

TENANT FEATURES

- Entry: Private from street
- Open Space: Private-next to unit
- Room Sizes: Ample
- Sunlight & Exposure: Good
- Dining Area: Separate space
- Family Room: Yes
- Unit Character: 2 Story House

DEVELOPMENT FEATURES

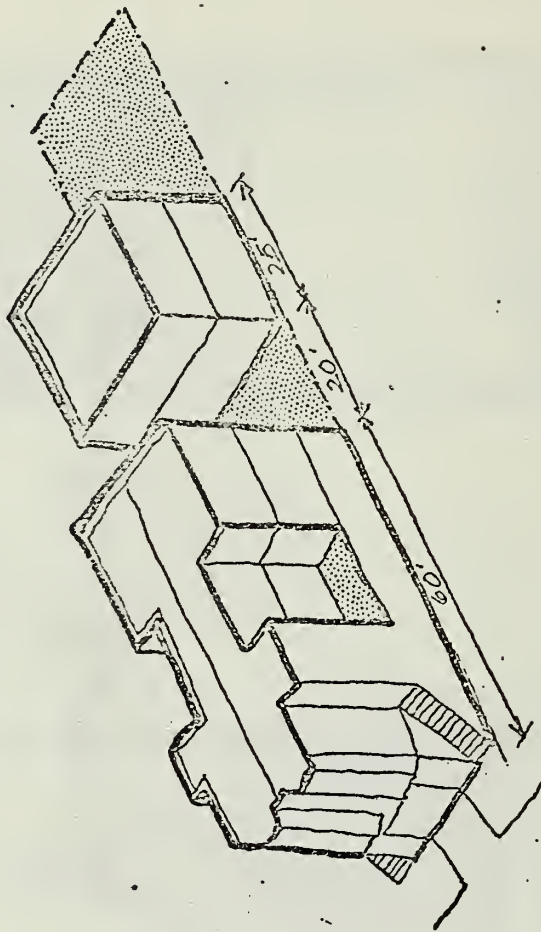
- Construction: Non-stacking
framing & plumbing-2 Story
units
- Perimeter Ratio: Medium
- Circulation Efficiency: Medium -
separate interior stairs,
shared fire egress
- Mother-in-Law Unit Possibility: No

URBAN DESIGN FEATURES

- Height: 30' at street, 20' at
rear yard
- Facade Modulation: 12.5 module
- Curb Cut: 10' cut per 25'
- Character: Townhouse

MINIMUM LOT SIZE

137.5' lot with 75% coverage

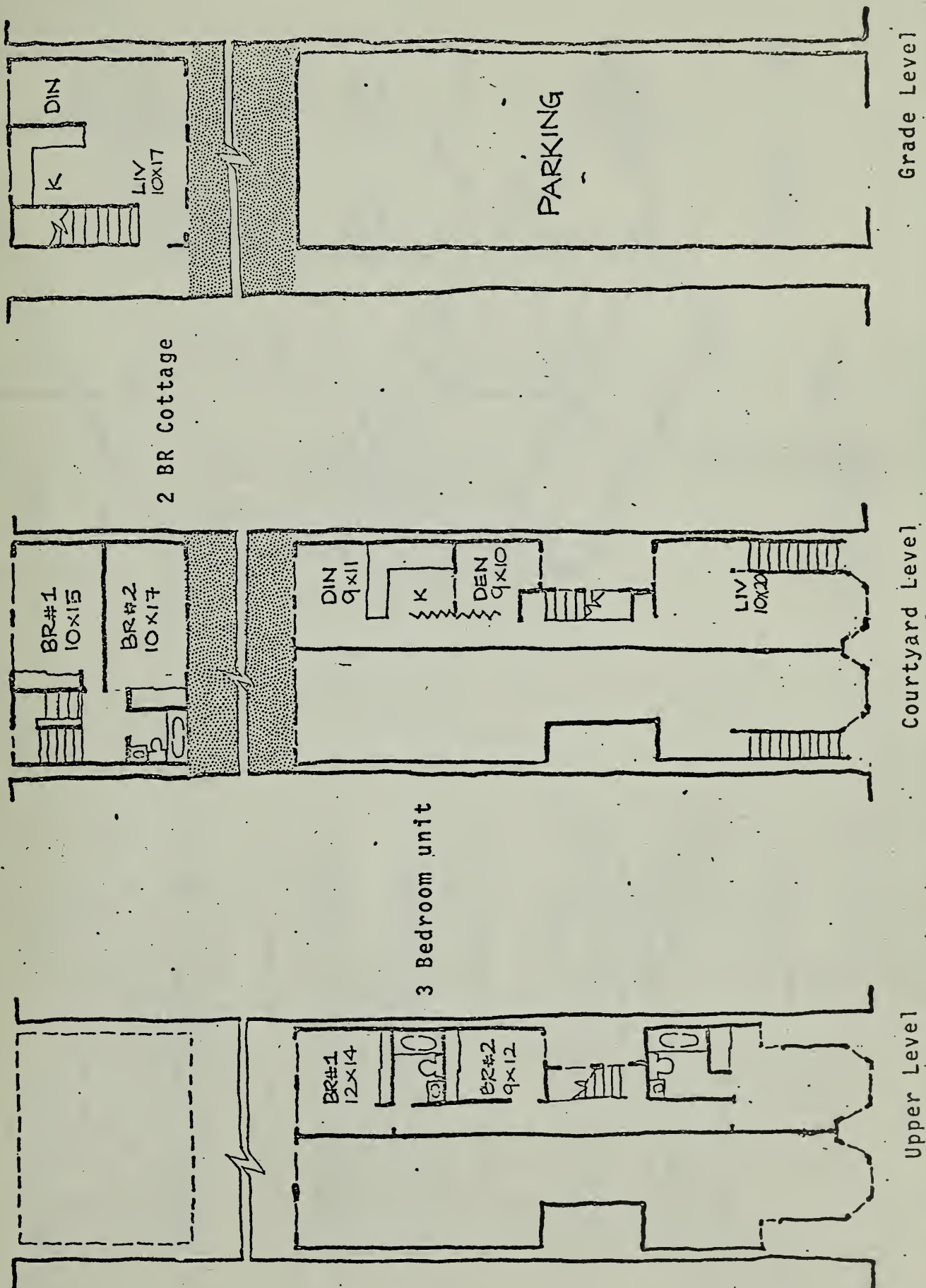


(with 20' court at grade).

2-Railroad Houses

1-Small News Cottage

TYPE 24



UNITS

- 3-3BR, 2BA-1400 sq. ft.
- 3 stories above parking
- Rear studio varies with size of lot.

TENANT FEATURES

- Entry: common exterior stairway/private passage to rear unit.
- Open Space: common rear yard next to grade rear unit/common roof deck above rear unit
- Room Sizes: ample
- Sunlight & Exposure: minimal
- Dining Area: separate room
- Family Room: no
- Unit Character: flat-like

DEVELOPMENT FEATURES

- Construction: stacked framing & plumbing/simple section
- Perimeter Ratio: medium
- Circulation Efficiency: good, shared stairs & fire egress
- Mother-In-Law Unit Possibility: No (Extra unit replaces M.I.L. possibility)

URBAN DESIGN FEATURES (10' high

- TOSA not contingent on adjacent lot coverage)
- Height: 40' at street; 10' at rear yard
- Facade Modulation: 25' module
- Curb Cut: 10' per 25' required
- Character: flat-like, RH-3 character.

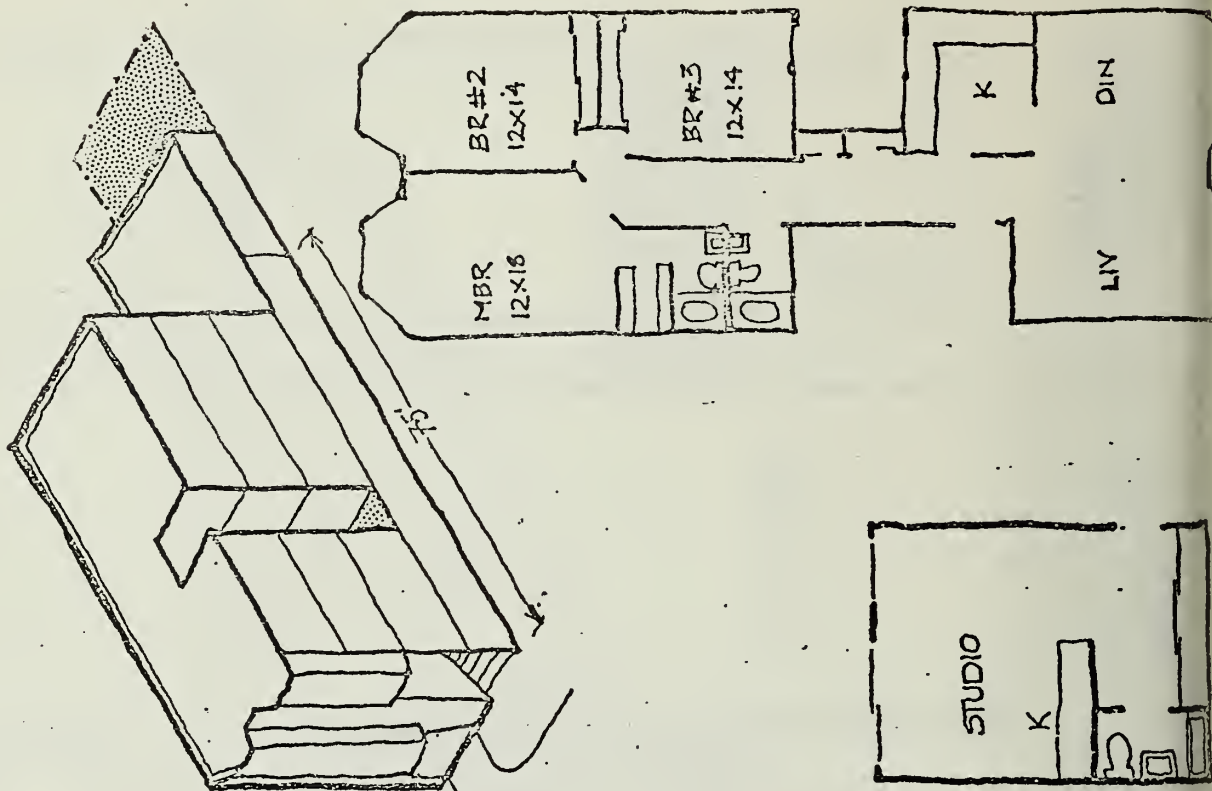
MINIMUM LOT SIZE

- Project Coverage
- 55% lot size plus presenting allowable TOSA
- 10' High TOSA not contingent on

LOT COVERAGE

Conventional project plus 10' high TOSA

TYPE 25



1 3BR, 2BA-1400 sq. ft.
 2 2BR, 1BA-900 sq. ft.
 2 1BR, 1BA-750 sq. ft.

25' x 80' parking
 Residential Units
 25' 65'

TYPE 26

TENANT FEATURES

- Entry: common lobby and stair (or elevator)
- Open Space: common rear yard; not next to any unit
- Room Sizes: ample
- Sunlight & Exposure: minimal
- Dining Area: 3BR-separate room/ other units-with kitchen
- Family Room: no
- Unit Character: apt. character

DEVELOPMENT FEATURES

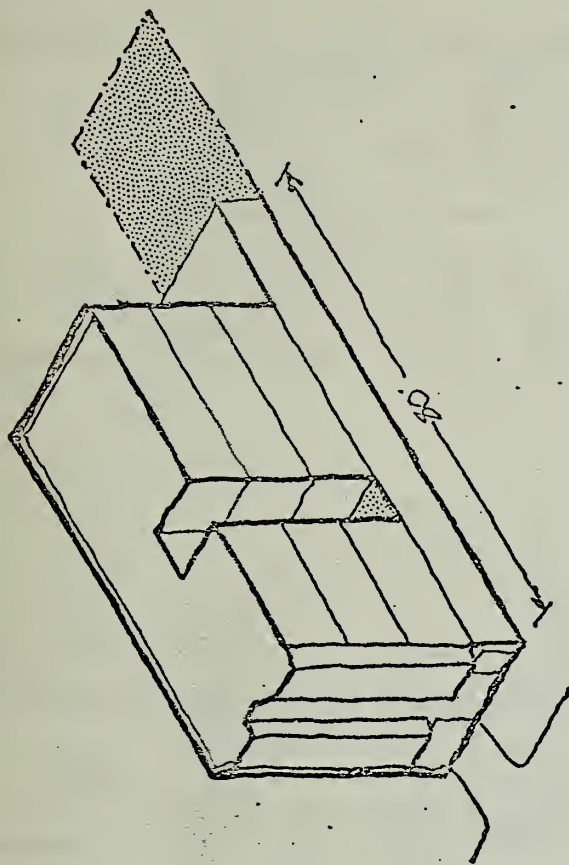
- Construction: partially stacked framing & plumbing
- Perimeter Ratio: low
- Circulation Efficiency: good, shared interior stairway & fire egress
- Mother-In-Law Unit Possibility: No

URBAN DESIGN FEATURES

- Height: 40' at street
- Facade Modulation: 25' module
- Curb cut: 10' cut per 25'
- Character: flat apt.

MINIMUM LOT SIZE

112' lot w/ 75% lot coverage
 120' lot w/ 70% lot coverage
 137.5' lot w/ 60% lot coverage

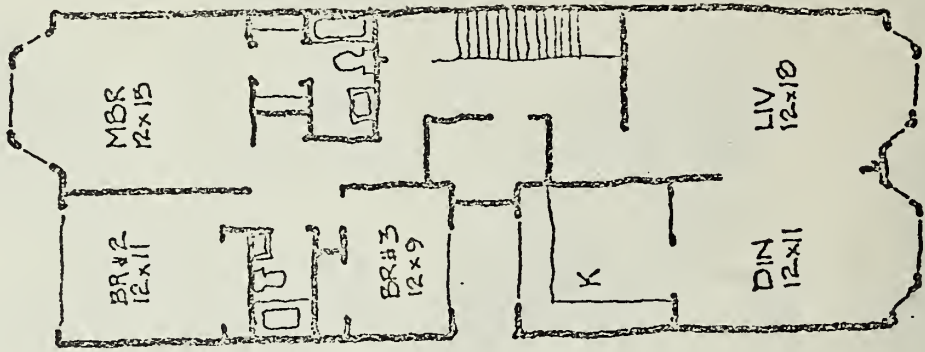
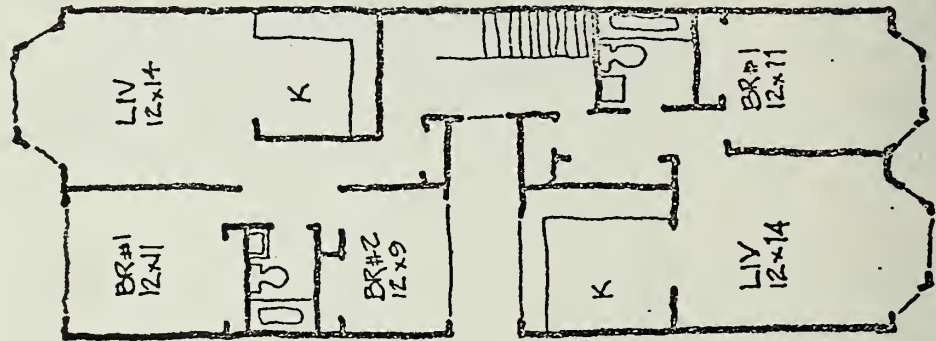


LOT COVERAGE

25' x 80' parking
Residential Units
25'-65'

TYPE

26



3-1 BK, 1 BA 600 sq. ft.
9-2 BR, 1 1/2 BA 750 sq. ft.

50 x 75
12 unit apt.
3 stories above parking

TYPE 27

TENANT FEATURES

- Entry: common lobby/elevator
- Open Space: common rear yard, not next to units
- Room Sizes: small
- Sunlight & Exposure: minimal
- Dining Area: with kitchen
- Family Room: no
- Unit Character: apartment-like

DEVELOPMENT FEATURES

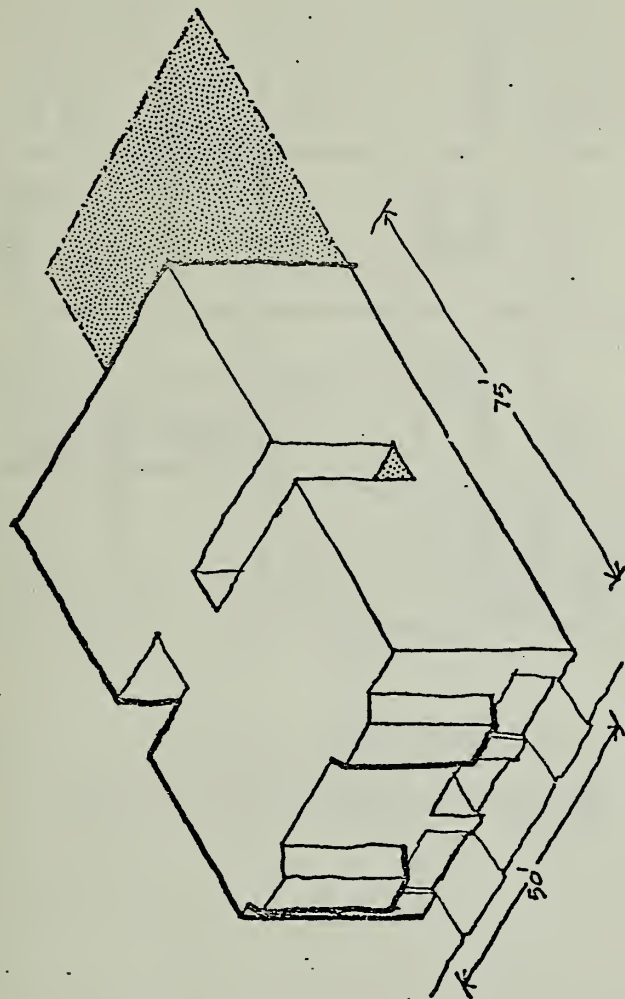
- Construction: simple section; stacked framing and plumbing
- Perimeter Ratio: Low
- Circulation Efficiency: good; shared stairway & fire egress
- Mother-In-Law Unit Possibility: no

URBAN DESIGN FEATURES

- Height: 40'
- Facade Modulation: 50'
- Curb Cut: 20'/50'
- Character: apart. building

MINIMUM LOT SIZE

- 100' lot with 75% lot coverage
- 112' lot with 70% lot coverage
- 120' lot with 65% lot coverage
- 137.5' lot with 55% lot coverage



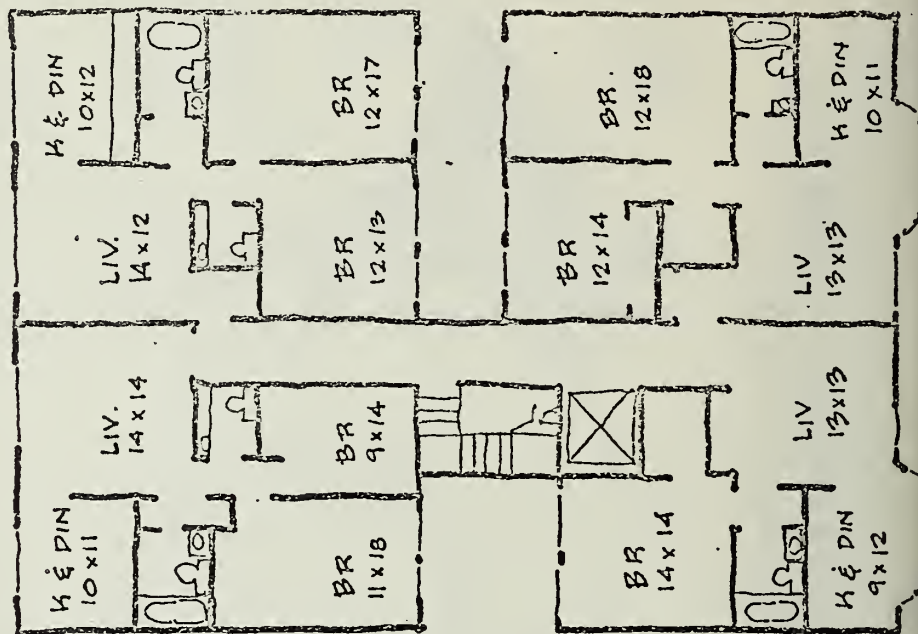
LOT COVERAGE

50 x 75

12 unit apt.

3 stories above parking

TYPE 27



APPENDIX C

REALTOR AND BUILDER INTERVIEW SCHEDULES

REALTOR INTERVIEW SCHEDULE

NAME _____ DATE _____ TIME _____

COMPANY NAME _____

COMPANY ADDRESS _____ PHONE _____

DISTRICT (s) _____ SUBMARKET _____ CENSUS TRACT (s) _____

PRE-MAY 20 ZONING IN AREA _____

POST-MAY 20 ZONING IN AREA _____

I. Type, Amount, Value of Existing Uses

<u>Type</u>	<u>Amount</u>	<u>Rent/Unit</u>	<u>Sales Price</u>
Single Row	_____	_____	_____
Single Detached	_____	_____	_____
2 Units	_____	_____	_____
3 Units	_____	_____	_____
4 Units	_____	_____	_____
5-9 Units	_____	_____	_____
10+ Units	_____	_____	_____
Vacant	_____	(By Zoning Designation:)	_____
	_____		_____
	_____		_____

II. Gross Rent Multiplier _____

III. New Construction Values

Type	Prototype	Description	Rent/Month	Sales Price	Multiplier
Single-Family	1	1-story, 1200 sq. ft.			
	2	2-story, 1750 sq. ft.			
	4	1-story, 1250 sq. ft.			
	6	2-story, 2100 sq. ft.			
	7	2-story, 1900 sq. ft.			
Two Unit	10	2 3BR flats, 1200 s.f.			
	11	2 3BR flats, 1400 s.f.			
	12	2 3BR townhouses 1400 s.f.			
	14	2 3BR railroad, 1400 sf			
Two + One Units	15	tandem units, 3-3BR, 1500 sq. ft. 3-2BR, 1200 sq. ft.			
	16	2-3BR, 1400 sq. ft. studio, s.f. varies			
	17	2-3BR, 1400 sq. ft. 1-2BR, 900 sq. ft.			
Three Units	19	1-3BR, 1400 sq. ft. 1-2BR, 900 sq. ft. 1-1BR, 750 sq. ft.			
	20	3-3BR, 1200 sq. ft.			
	22	2-3BR, 1450 sq. ft. studio, 500 sq. ft.			
	24	2-3BR, 1400 sq. ft. 1-2BR, 1100 sq. ft.			
Three + One Units	25	3-3BR, 1400 sq. ft. studio, s.f. varies			
Three + Two Units	26	1-3BR, 1400 sq. ft. 2-2BR, 900 sq. ft. 2-1BR, 750 sq. ft.			
Four + Units	27	9-2BR, 750 sq. ft. 3-1BR, 600 sq. ft.			

IV. Most Likely to be Built in Area

Prototypes 1-7 _____

Prototypes 1-14 _____

Prototypes 1-15 _____

Prototypes 1-24 _____

Prototypes 1-25 _____

Prototypes 1-26 _____

Prototypes 1-27 _____

V. Additional Information

BUILDER INTERVIEW SCHEDULE

NAME _____ DATE _____ TIME _____
COMPANY NAME _____
COMPANY ADDRESS _____ PHONE _____
DISTRICT(S) _____ SUBMARKET _____ CENSUS TRACT(S) _____

I. SITE COSTS

A. Site Preparation Costs: (includes cleaning, grubbing, leveling and bringing in water, sewer, power)

B. Demolition Costs: (varies by size of building)

C. Other "Soft Costs" (includes architectural fees, service charges and interest of construction loan, legal fees, title fees)

Type	Prototype	Description	\$ Per Sq. Ft.	Raw Construc- tion Cost	Financing Cost	Total Construction Cost
Single-Family	1	living 1200 garage 1200				
	2	living 1750 (25x30) garage 750				
	4	living 1250 (25x25) garage 625				
	6	living 2100 (17x25) garage 510				
	7	living 1900 garage 950				
	10	living 2400 garage 1200				
	11	living 2800 garage 1400				
Two Unit	12	living 2700 (47x25) garage 1175				
	14	living 2800 (17x60) garage 1020				
	15	living 4500 3600				
		(50x15) garage 750				
Two + One Units	16	living 2800 300				
		garage 1400				
	17	living 2800 900				
		garage 1400				



